

From Baffled to Amazed – My z/OSMF Journey

Session 48245
Jerry Spencer
DTS Software, LLC
August 17, 2023

About the Presenter – Jerry Spencer

- Started as an application programmer in 1975
- Became a System Programmer in 1978
- My career pre-dates:
 - The Internet (as we know it)
 - PC's (laptops/desktops/tablets)
 - Cell Phones
 - WiFi
- Passion for sharing knowledge and experience
- z/OSMF workflows are an excellent vehicle to express this passion



Agenda

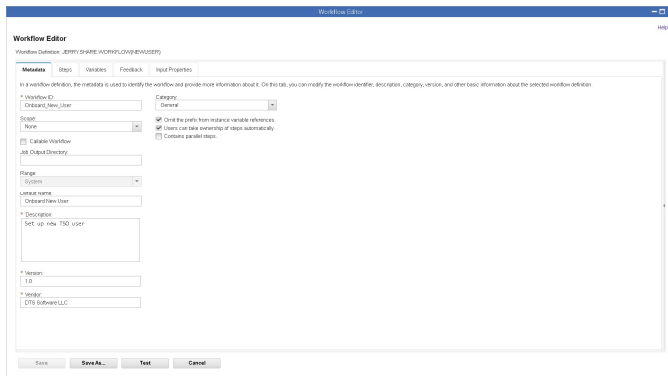
- **BUILDING A MORE ROBUST WORKFLOW**
- **EXECUTE THE WORKFLOW**
- **AN EVEN MORE COMPLEX WORKFLOW**
- **“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”**
- **WRAP UP**



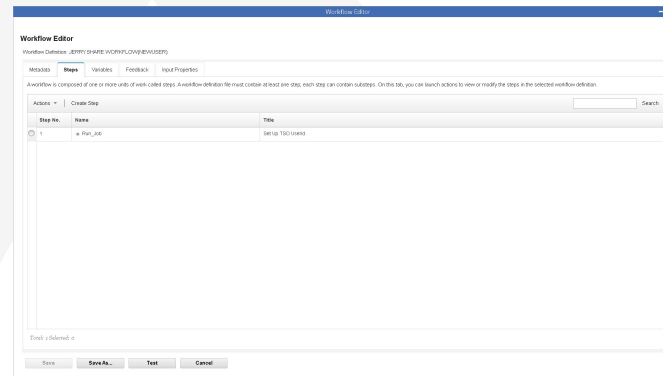
BUILDING A MORE ROBUST WORKFLOW

BUILDING A MORE ROBUST WORKFLOW

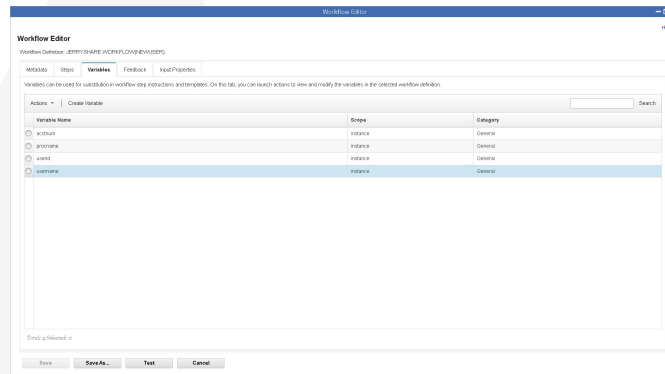
Humble beginnings of my 1st workflow...



One single step...



Four variables...



Variable Name	Scope	Category
hostname	instance	General
ip	instance	General
username	instance	General
password	instance	General

The continuing story of an old dog trying to learn new tricks.



BUILDING A MORE ROBUST WORKFLOW

Introducing our first workflow of the day: *Autoinstall DTS Software*

- Saves time & makes sure the right steps are done consistently.
- Nine steps
- This workflow coming soon to an install near you

I know DTS software is easy to install, but let's make it even easier!

BUILDING A MORE ROBUST WORKFLOW

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(AUTOINST)

Metadata Steps Variables Feedback Input Properties

In a workflow definition, the metadata is used to identify the workflow and provide more information about it. On this tab, you can modify the workflow identifier, description, category, version, and other basic information about the selected workflow definition.

* Workflow ID:
Install_DTS_Product_Suite

Category:
General

Scope:
System

☒ Callable Workflow

Job Output Directory:
/usr/jerry/installjobs

Range:
System

Default Name:

* Description:
Install the DTS Software suite of products.

* Version:
7.1

* Monitor

Save Save As... Test Cancel

JERRY2

No longer baby steps. Not sprinting but walking confidently.

Can be called by other workflows (we will re-visit this later)

BUILDING A MORE ROBUST WORKFLOW

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(AUTOINST)

Metadata Steps Variables Feedback Input Properties

A workflow is composed of one or more units of work called steps. A workflow definition file must contain at least one step, each step can contain substeps. On this tab, you can launch actions to view or modify the steps in the selected workflow definition.

Actions Create Step Search

Step No.	Name	Title
1	■ INSTEP01	Create the production data sets
2	■ INSTEP02	APF Authorize the Loadlib data set
3	■ INSTEP03	Add the DIF proc to PROCLIB
4	■ INSTEP04	Copy members into the PARMLIB, ISPF, and RULE Libraries
5	■ INSTEP05	Copy modules into an APF authorized library
6	■ INSTEP06	Link DTS modules into an APF authorized library
7	■ INSTEP07	Implement ISPF interface
8	■ INSTEP08	Install LICENSE member
9	■ INSTEP09	Verify the installation

Total: 9 Selected: 0

Save Save As... Test Cancel

JERRY2

Install step names that match the members of our install data set.

BUILDING A MORE ROBUST WORKFLOW

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(AUTOINST)

Metadata Steps **Variables** Feedback Input Properties

Variables can be used for substitution in workflow step instructions and templates. On this tab, you can launch actions to view and modify the variables in the selected workflow definition.

Actions ▾ | Create Variable Search

Variable Name	Scope	Category
☐ disth1q	instance	General
☐ prodh1q	instance	General
☐ serv1v1	instance	General
☐ version	instance	General
☐ volser	instance	General

Total: 5 Selected: 0

Save Save As... Test Cancel

JERRY2

Variables the installer needs to assign values to for a successful install.

BUILDING A MORE ROBUST WORKFLOW

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(AUTOINST)

Metadata Steps Variables Feedback Input Properties

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Actions Create Step Search

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1	INSTEP01	Create the production data sets
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6	INSTEP06	Link DTS modules into an APF authorized library
7	INSTEP07	Implement ISPF interface
8	INSTEP08	Install LICENSE member
9	INSTEP09	Verify the installation

Total: 9 Selected: 1

Save Save As... Test Cancel

Variable Details

Step Details

Overview Prerequisites Instructions Type Conditions Security Variables Feedback

* Name: INSTEP01

* Title: Create the production data sets

Description: This step creates the production data sets. It creates the following data sets:
hlq.{version}.LOADLIB
hlq.{version}.PARMLIB
hlq.{version}.RULECKPT

* Weight (1-1000): 10

Skills: General

Step Type: Inline Template

☐ Optional Step

☒ Auto-Enable

☐ Allow manual marking of step failure

Help

I have two different **Step Types** in this workflow.

This one is an inline template. It allows the workflow to submit a job.

Auto-Enable allows the step to automatically execute.

BUILDING A MORE ROBUST WORKFLOW

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(AUTOINST)

Metadata Steps Variables Feedback Input Properties

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7	INSTEP07	Implement ISPF interface
8	INSTEP08	Install LICENSE member
9	INSTEP09	Verify the installation

Total: 9 Selected: 1

Save Save As... Test Cancel

Variable Details

Step Details

Overview Prerequisites Instructions **Type** Conditions Security Variables Feedback

Template Contents

The step type indicates the type of processing that the step performs. On this tab, you can modify the related details.

Step Type: Inline Template

* Submit Template As:
JCL

Max RC:
0

Max LRECL:
80

Template Contents:

```
/**  
/** CREATE THE DIF PRODUCTION DATA SETS  
/**  
//STEP01 EXEC PGM=IEFBR14  
//DD1 DD DSN=${prodlq}.${version}.LOADLIB,  
// DISP=(NEW,CATLG,DELETE),UNIT=SYSALLDA,  
// SPACE=(CYL,(5,2,80)),VOL=SER=${volser},  
// DCB=(RECFM=U,BLKSIZE=6144,DSORG=PO)  
//DD2 DD DSN=${prodlq}.${version}.PARMLIB,  
// DISP=(NEW,CATLG,DELETE),UNIT=SYSALLDA,
```

Help

The **Type** tab defines the characteristics of the step.

Select the **Step Type** (in this case **Inline Template**).

Select how the template should be submitted (**JCL**) and the **MAX RC** that is acceptable.

Finally, select the actual JCL if this is an Inline Template

BUILDING A MORE ROBUST WORKFLOW

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(AUTOINST)

Metadata Steps Variables Feedback Input Properties

A workflow is composed of one or more units of work called steps. A workflow definition file must contain at least one step, each step can contain substeps. On this tab, you can launch actions to view or modify the steps in the selected workflow definition.

Step No.	Name	Title
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7	INSTEP07	Implement ISPF interface
8	INSTEP08	Install LICENSE member
9	INSTEP09	Verify the installation

Total: 9 Selected: 1

Save Save As... Test Cancel

Variable Details

Step Details

Overview Prerequisites Instructions Type Conditions Security Variables Feedback

* Name: INSTEP02

* Title: APF Authorize the Loadlib data set

Description: Follow these instructions if this is the first time you are installing the DTS sui

* Weight (1-1000): 20

Skills: System Programmer

Step Type: Instructions Only

☒ Optional Step
☒ Auto-Enable
☐ Allow manual marking of step failure

Help

For Instructions Only steps, no actions are taken by z/OSMF.

Instruct the user to take actions but...

- it doesn't take them.
- Nor can it guarantee the actions are taken.

BUILDING A MORE ROBUST WORKFLOW

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(AUTOINST)

Metadata **Steps** Variables Feedback Input Properties

A workflow is composed of one or more units of work called steps. A workflow definition file must contain at least one step; each step can contain substeps. On this tab, you can launch actions to view or modify the steps in the selected workflow definition.

Actions ▾ | Create Step Search

Step No.	Name	Title
☐ 1	■ INSTEP01	Create the production data sets
☒ 2	■ INSTEP02	APF Authorize the Loadlib data set
☐ 3	■ INSTEP03	Add the DIF proc to PROCLIB
☐ 4	■ INSTEP04	Copy members into the PARMLIB, ISPF, and RULE Libraries
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☐ 6	■ INSTEP06	Link DTS modules into an APF authorized library
☐ 7	■ INSTEP07	Implement ISPF interface
☐ 8	■ INSTEP08	Install LICENSE member
☐ 9	■ INSTEP09	Verify the installation

Total: 9 Selected: 1

Save Save As... Test Cancel

Variable Details

Step Details

Overview Prerequisites Instructions **Type** Conditions Security Variables Feedback ▾

Template Contents

The step type indicates the type of processing that the step performs. On this tab, you can modify the related details.

Step Type: Instructions Only ▾

An Instructions Only step does not have type-specific properties to modify. To view the contents of this step, see the Instructions tab.

Help

Here I specify
**Instructions
Only** as the step
type under the
Type tab.

BUILDING A MORE ROBUST WORKFLOW

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(AUTOINST)

Metadata Steps Variables Feedback Input Properties

A workflow is composed of one or more units of work called steps. A workflow definition file must contain at least one step, each step can contain substeps. On this tab, you can launch actions to view or modify the steps in the selected workflow definition.

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7	INSTEP07	Implement ISPF interface
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9	INSTEP09	Verify the installation

Total: 9 Selected: 1

Save Save As... Test Cancel

Variable Details

Step Details

Overview Prerequisites **Instructions** Type Conditions Security Variables Feedback

Step Instructions

The user requires detailed instructions for performing the step to completion. On this tab, you can modify the user instructions for the selected step.

```
<strong>Only perform this installation step when installing version 7.1 for the first time.</strong><br><br>The Dynamic Install Facility (<strong>DIF</strong>) must be executed from an authorized load library. The manual assumes the DIF load library will be created in the first installation step, and subsequent steps will link DIF and product load modules into an authorized library. This section explains how to authorize the DIF load library.<br><br>The authorized data sets on your system can be found in two places. Older MVS systems authorize data sets with member <strong>SYS1.PARMLIB(IEAAPFnn)</strong>. MVS/ESA and OS/390 systems have an additional PARMLIB member to authorize data sets - examine member <strong>SYS1.PARMLIB(PROGnn)</strong>. Note: in most cases, the nn will use 00.</strong><br><br>On MVS/ESA and OS/390 systems, the APF authorized data sets can be listed by an operator command, and modified without an IPL. The following console command can be used to list the current APF authorized libraries found on your system.<br><br></pre>

☒ Contains variable substitution



Open in z/OSMF Desktop Editor



Help


```

The **Instructions** tab allows me to specify the instructions that the user needs to read and follow.

BUILDING A MORE ROBUST WORKFLOW

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(AUTOINST)

Metadata **Steps** Variables Feedback Input Properties

A workflow is composed of one or more units of work called steps. A workflow definition file must contain at least one step, each step can contain substeps. On this tab, you can launch actions to view or modify the steps in the selected workflow definition.

Step No.	Name	Title	Signature Status
1	INSTEP01	Create the production data sets	N/A
2	INSTEP02	APF Authorize the Loadlib data set	N/A
3	INSTEP03	Add the DIF proc to PROCLIB	N/A
4	INSTEP04	Copy members into the PARMLIB, ISPF, and RULE Libraries	N/A
5	INSTEP05	Copy modules into an APF authorized library	N/A
6	INSTEP06	Link DTS modules into an APF authorized library	N/A
7	INSTEP07	Implement ISPF interface	N/A
8	INSTEP08	Install LICENSE member	N/A
9	INSTEP09	Verify the installation	N/A

Total: 9 Selected: 1

Save Save As... Test Cancel

Variable Details

Step Details

Overview **Prerequisites** Instructions Type Conditions Security Variables Feedback

Step Prerequisites

A step might require other steps to be completed before it can be performed. On this tab, you can modify the list of prerequisite steps for the selected step.

Eligible Prerequisite Steps

Existing Prerequisite Steps

Description:

☒ None ☐ Target State ☐ State Expression ☐ Extended Expression

Help

The **Prerequisites** tab is where I specify the prerequisites for my workflow

The first step, of course, has no prerequisites

BUILDING A MORE ROBUST WORKFLOW

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(AUTOINST)

Metadata Steps Variables Feedback Input Properties

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Step No.	Name	Title	Signature Status
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2	■ INSTEP02	APF Authorize the Loadlib data set	N/A
3	■ INSTEP03	Add the DIF proc to PROCLIB	N/A
4	■ INSTEP04	Copy members into the PARMLIB, ISPF, and RULE Libraries	N/A
5	■ INSTEP05	Copy modules into an APF authorized library	N/A
6	■ INSTEP06	Link DTS modules into an APF authorized library	N/A
7	■ INSTEP07	Implement ISPF interface	N/A
8	■ INSTEP08	Install LICENSE member	N/A
9	■ INSTEP09	Verify the installation	N/A

Total: 9 Selected: 1

Save Save As... Test Cancel

Variable Details

Step Details

Overview Prerequisites Instructions Type Conditions Security Variables Feedback

Step Prerequisites

A step might require other steps to be completed before it can be performed. On this tab, you can modify the list of prerequisite steps for the selected step.

Eligible Prerequisite Steps

Existing Prerequisite Steps

INSTEP01

Description:

☒ None ☐ Target State ☐ State Expression ☐ Extended Expression

Help

The second step can only run if the first step runs successfully.

BUILDING A MORE ROBUST WORKFLOW

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(AUTOINST)

Metadata Steps Variables Feedback Input Properties

A workflow is composed of one or more units of work called steps. A workflow definition file must contain at least one step, each step can contain substeps. On this tab, you can launch actions to view or modify the steps in the selected workflow definition.

Step No.	Name	Title	Signature Status
1	INSTEP01	Create the production data sets	N/A
2	INSTEP02	APF Authorize the Loadlib data set	N/A
3	INSTEP03	Add the DIF proc to PROCLIB	N/A
4	INSTEP04	Copy members into the PARMLIB, ISPF, and RULE Libraries	N/A
5	INSTEP05	Copy modules into an APF authorized library	N/A
6	INSTEP06	Link DTS modules into an APF authorized library	N/A
7	INSTEP07	Implement ISPF interface	N/A
8	INSTEP08	Install LICENSE member	N/A
9	INSTEP09	Verify the installation	N/A

Total: 9 Selected: 1

Variable Details

Step Details

Overview Prerequisites Instructions Type Conditions Security Variables Feedback

Step Prerequisites

A step might require other steps to be completed before it can be performed. On this tab, you can modify the list of prerequisite steps for the selected step.

Eligible Prerequisite Steps

Existing Prerequisite Steps

INSTEP02

INSTEP01

Description:

☒ None ☐ Target State ☐ State Expression ☐ Extended Expression

Help

Save Save As... Test Cancel

Step 3 can only run after step 1 runs successfully.

Step 2 is **NOT** required

BUILDING A MORE ROBUST WORKFLOW

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(AUTOINST)

Metadata Steps Variables Feedback Input Properties

A workflow is composed of one or more units of work called steps. A workflow definition file must contain at least one step, each step can contain substeps. On this tab, you can launch actions to view or modify the steps in the selected workflow definition.

Step No.	Name	Title	Signature Status
1	INSTEP01	Create the production data sets	N/A
2	INSTEP02	APF Authorize the Loadlib data set	N/A
3	INSTEP03	Add the DIF proc to PROCLIB	N/A
4	INSTEP04	Copy members into the PARMLIB, ISPF, and RULE Libraries	N/A
5	INSTEP05	Copy modules into an APF authorized library	N/A
6	INSTEP06	Link DTS modules into an APF authorized library	N/A
7	INSTEP07	Implement ISPF interface	N/A
8	INSTEP08	Install LICENSE member	N/A
9	INSTEP09	Verify the installation	N/A

Total: 9 Selected: 1

Variable Details

Step Details

Overview Prerequisites Instructions Type Conditions Security Variables Feedback

Step Prerequisites

A step might require other steps to be completed before it can be performed. On this tab, you can modify the list of prerequisite steps for the selected step.

Eligible Prerequisite Steps	Existing Prerequisite Steps
INSTEP02	INSTEP01
INSTEP03	

Description:

☒ None ☐ Target State ☐ State Expression ☐ Extended Expression

Help

Save Save As... Test Cancel

Step 4 can only run after step 1 completes successfully.

Steps 2 & 3 are not required

BUILDING A MORE ROBUST WORKFLOW

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(AUTOINST)

Metadata Steps Variables Feedback Input Properties

A workflow is composed of one or more units of work called steps. A workflow definition file must contain at least one step, each step can contain substeps. On this tab, you can launch actions to view or modify the steps in the selected workflow definition.

Step No.	Name	Title	Signature Status
1	INSTEP01	Create the production data sets	N/A
2	INSTEP02	APF Authorize the Loadlib data set	N/A
3	INSTEP03	Add the DIF proc to PROCLIB	N/A
4	INSTEP04	Copy members into the PARMLIB, ISPF, and RULE Libraries	N/A
5	INSTEP05	Copy modules into an APF authorized library	N/A
6	INSTEP06	Link DTS modules into an APF authorized library	N/A
7	INSTEP07	Implement ISPF interface	N/A
8	INSTEP08	Install LICENSE member	N/A
9	INSTEP09	Verify the installation	N/A

Total: 9 Selected: 1

Save Save As... Test Cancel

Variable Details

Step Details

Overview Prerequisites Instructions Type Conditions Security Variables Feedback

Step Prerequisites

A step might require other steps to be completed before it can be performed. On this tab, you can modify the list of prerequisite steps for the selected step.

Eligible Prerequisite Steps

INSTEP02
INSTEP03

Existing Prerequisite Steps

INSTEP01
INSTEP04

Description:

☒ None ☐ Target State ☐ State Expression ☐ Extended Expression

Help

Step 5 can only run after steps 1 & 4 complete successfully

BUILDING A MORE ROBUST WORKFLOW

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(AUTOINST)

Metadata Steps Variables Feedback Input Properties

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Step No.	Name	Title	Signature Status
1	INSTEP01	Create the production data sets	N/A
2	INSTEP02	APF Authorize the Loadlib data set	N/A
3	INSTEP03	Add the DIF proc to PROCLIB	N/A
4	INSTEP04	Copy members into the PARMLIB, ISPF, and RULE Libraries	N/A
5	INSTEP05	Copy modules into an APF authorized library	N/A
6	INSTEP06	Link DTS modules into an APF authorized library	N/A
7	INSTEP07	Implement ISPF interface	N/A
8	INSTEP08	Install LICENSE member	N/A
9	INSTEP09	Verify the installation	N/A

Total: 9 Selected: 1

Save Save As... Test Cancel

Variable Details

Step Details

Overview Prerequisites Instructions Type Conditions Security Variables Feedback

Step Prerequisites

A step might require other steps to be completed before it can be performed. On this tab, you can modify the list of prerequisite steps for the selected step.

Eligible Prerequisite Steps	Existing Prerequisite Steps
INSTEP02	INSTEP01
INSTEP03	INSTEP04
	INSTEP05

Description:

☒ None ☐ Target State ☐ State Expression ☐ Extended Expression

Help

Step 6 can only run after steps 1, 4, & 5 complete successfully.

BUILDING A MORE ROBUST WORKFLOW

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(AUTOINST)

Metadata Steps Variables Feedback Input Properties

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Step No.	Name	Title	Signature Status
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4	INSTEP04	Copy members into the PARMLIB, ISPF, and RULE Libraries	N/A
5	INSTEP05	Copy modules into an APF authorized library	N/A
6	INSTEP06	Link DTS modules into an APF authorized library	N/A
7	INSTEP07	Implement ISPF interface	N/A
8	INSTEP08	Install LICENSE member	N/A
9	INSTEP09	Verify the installation	N/A

Total: 9 Selected: 1

Save Save As... Test Cancel

Variable Details

Step Details

Overview Prerequisites Instructions Type Conditions Security Variables Feedback

Step Prerequisites

A step might require other steps to be completed before it can be performed. On this tab, you can modify the list of prerequisite steps for the selected step.

Eligible Prerequisite Steps	Existing Prerequisite Steps
INSTEP02	INSTEP01
INSTEP03	INSTEP04
	INSTEP05
	INSTEP06

Description:

☒ None ☐ Target State ☐ State Expression ☐ Extended Expression

Help

Step 7 can only run after steps 1, 4, 5, & 6 complete successfully

BUILDING A MORE ROBUST WORKFLOW

And so on ...

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(AUTOINST)

Metadata Steps Variables Feedback Input Properties

A workflow is composed of one or more units of work called steps. A workflow definition file must contain at least one step, each step can contain substeps. On this tab, you can launch actions to view or modify the steps in the selected workflow definition.

Step No.	Name	Title	Signature Status
1	INSTEP01	Create the production data sets	N/A
2	INSTEP02	APF Authorize the Loadlib data set	N/A
3	INSTEP03	Add the DIF proc to PROCLIB	N/A
4	INSTEP04	Copy members into the PARMLIB, ISPF, and RULE Libraries	N/A
5	INSTEP05	Copy modules into an APF authorized library	N/A
6	INSTEP06	Link DTS modules into an APF authorized library	N/A
7	INSTEP07	Implement ISPF interface	N/A
8	INSTEP08	Install LICENSE member	N/A
9	INSTEP09	Verify the installation	N/A

Total: 9 Selected: 1

Save Save As... Test Cancel

Variable Details

Step Details

Overview Prerequisites Instructions Type Conditions Security Variables Feedback

Step Prerequisites

A step might require other steps to be completed before it can be performed. On this tab, you can modify the list of prerequisite steps for the selected step.

Eligible Prerequisite Steps

INSTEP02
INSTEP03

Existing Prerequisite Steps

INSTEP01
INSTEP04
INSTEP05
INSTEP06
INSTEP07

Description:

☒ None ☐ Target State ☐ State Expression ☐ Extended Expression

Help

BUILDING A MORE ROBUST WORKFLOW

... and so on

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(AUTOINST)

Metadata **Steps** Variables Feedback Input Properties

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8	INSTEP08	Install LICENSE member	N/A
9	INSTEP09	Verify the installation	N/A

Total: 9 Selected: 1

Save Save As... Test Cancel

Variable Details

Step Details

Overview **Prerequisites** Instructions Type Conditions Security Variables Feedback

Step Prerequisites

A step might require other steps to be completed before it can be performed. On this tab, you can modify the list of prerequisite steps for the selected step.

Eligible Prerequisite Steps	Existing Prerequisite Steps
INSTEP02	INSTEP01
INSTEP03	INSTEP04
	INSTEP05
	INSTEP06
	INSTEP07
	INSTEP08

Description:

☒ None ☐ Target State ☐ State Expression ☐ Extended Expression

Help



EXECUTE THE WORKFLOW

EXECUTE THE WORKFLOW

Workflows

Simplifies tasks through guided step-based workflows, and provides administrative functions for assigning workflow responsibilities and tracking progress.

Actions Active Search

- View Properties
- Open
- Modify...
- Cancel
- Delete
- Archive...
- Stop Automation
- Generate Feedback Summary
- Create New Based on Existing
- Reactivate...
- Update Workflow Steps
- Create Workflow...**
- Customize JOB Statement
- Workflows View
- ☒ Select All
- ☐ Deselect All
- Configure Columns...
- Hide Filter Row
- Clear Sorts
- Clear Search

There is no data to display.

Total: 0 Selected: 0

Refresh Last refresh: Jul 5, 2023, 8:47:19 AM local time (Jul 5, 2023, 12:47:19 PM GMT)

Okay, I've created the source for the workflow so now I'll create the workflow.

(I double clicked on the Workflows option from the z/OSMF desktop to get here)

EXECUTE THE WORKFLOW

Specify the data
set that contains
the source.

Click on **Next**

Workflows

Settings | Help

Workflows

Simplifies tasks through guided step-based workflows, and provides administrative functions for assigning workflow responsibilities and tracking progress.

Actions ▾ Active ▾

No filter applied

Workflow Name Filter	Description Filter	Version Filter	Vendor Filter	Access Filter	Owner Filter	System Filter	Status	Percent Complete	Date Created(GMT) Filter
There is no data to display.									

Create Workflow

* Location (system) of definition and variable input files:
ADCDPL.S0W1 (S0W1)

* Workflow definition file:
JERRY.WORKFLOW.PDS(AUTOINST)

Workflow variable input file:
Select or type

< Back Next> Finish Cancel Help

Total: 0 Selected: 0

Refresh Last refresh: Jul 7, 2023, 11:24:39 AM local time (Jul 7, 2023, 3:24:39 PM GMT)

EXECUTE THE WORKFLOW

Workflows

Settings | Help

Actions ▾ Active ▾

No filter applied

Workflow Name Filter	Description Filter
-------------------------	-----------------------

Create Workflow

Location (system) of definition and variable input files:
ADCDPL.S0W1 (S0W1)

Workflow definition file:
JERRY.WORKFLOW.PDS(AUTOINST)

Description:
Install the DTS Software suite of products.

Vendor: DTS Software Version: 7.1 Is Callable: [?](#)
In the same system

* Workflow name:
Install the DTS Software suite of products - Workflow_0

* Owner user ID: jerry2 Archive SAF ID: [?](#) jerry2 * System (where workflow steps will be performed): ADCDPL.S0W1 (S0W1)

Comments:

* Access [\[Learn More\]](#)
[Public](#)

☒ Save jobs output
Jobs output directory: [?](#)
/usr/jerry/install/jobs

☒ Open workflow on finish ☐ Assign all steps to owner user ID ☐ Delete workflow on completion

< Back Next > Finish Cancel Help

Total: 0 Selected: 0

Refresh Last refresh: Jul 7, 2023, 11:24:39 AM local time (Jul 7, 2023, 3:24:39 PM GMT)

Did **NOT** Assign
all steps to owner
user id.

Will demonstrate
that you can
assign steps to
different users in
the following
slides

EXECUTE THE WORKFLOW

Workflows > Install the DTS Software suite of products. - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions

No filter applied

State Filter	No. Filter	Title Filter	CalledWorkflow Filter	Automated Filter	Owner Filter	Skill Category Filter	Assignees Filter	Feedback status Filter
☐ Unassigned	1	Create the production data sets		Yes		General		noFeedback
☐ Unassigned	2	(Optional) APF Authorize the Loadlib data set		Yes		System Programmer		noFeedback
☐ Unassigned	3	(Optional) Add the DIF proc to PROCLIB		Yes		System Programmer		noFeedback
☐ Unassigned	4	Copy members into the PARMLIB, ISPF, and RULE Libraries		Yes				noFeedback
☐ Unassigned	5	(Optional) Copy modules into an APF authorized library		Yes				noFeedback
☐ Unassigned	6	(Optional) Link DTS modules into an APF authorized library		Yes		Systems Programmer		noFeedback
☐ Unassigned	7	(Optional) Implement ISPF interface		Yes				noFeedback
☐ Unassigned	8	(Optional) Install LICENSE member		Yes				noFeedback
☐ Unassigned	9	(Optional) Verify the installation		Yes				noFeedback

Total: 9 Selected: 0

Return to Workflows Refresh Last refresh: Jul 5, 2023, 8:49:13 AM local time (Jul 5, 2023, 12:49:13 PM GMT)

All the steps are unassigned.

Allows me to assign a step to another user

EXECUTE THE WORKFLOW

JERRY2



JERRY



A quick username related digression...

Multiple JERRY related userids exist, here are some useful pictures to keep them separate in your minds.

EXECUTE THE WORKFLOW

Workflows > Install the DTS Software suite of products. - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions

- Properties
- Accept
- Perform
- Skip
- Status
- Override Complete
- Resolve Conflicts
- Change Called Workflow
- Assignment And Ownership
 - Add Assignees
 - Remove Assignees...
 - Return
 - Take Ownership
 - Request Assignment
- FeedBack
- Expand
- Collapse
- Export Workflow as Printable Format
- Select All Steps Assigned to Me
- Start Parallel Automation
- Stop Automation
- ☒ Select All
- ☐ Deselect All
- Configure Columns...
- Hide Filter Row
- Clear Search
- Expand All
- Collapse All

	CalledWorkflow Filter	Automated Filter	Owner Filter	Skill Category Filter	Assignees Filter	Feedback status Filter
Create the production data sets		Yes		General		noFeedback
(optional) APF Authorize the Loadlib data set		Yes		System Programmer		noFeedback
Integrate Add the PIF into PROCLIB		Yes		System Programmer		noFeedback
Remove Assignees...		Yes				noFeedback
Return		Yes				noFeedback
Take Ownership		Yes				noFeedback
Request Assignment		Yes		Systems Programmer		noFeedback
(optional) Link DTS modules into an APF authorized library		Yes				noFeedback
(optional) Implement ISPF interface		Yes				noFeedback
(optional) Install LICENSE member		Yes				noFeedback
(optional) Verify the installation		Yes				noFeedback

Total: 9 Selected: 8

Return to Workflows Refresh

Last refresh: Jul 5, 2023, 8:50:46 AM local time (Jul 5, 2023, 12:50:46 PM GMT)

I want to assign all the steps (except step 3) to JERRY2.

I want to assign step 3 to user JERRY.

EXECUTE THE WORKFLOW

Workflows

Workflows > Install the DTS Software suite of products. - Workflow_0 > Add Assignees

Add Assignees

Select one or more SAF user IDs, SAF groups or z/OSMF roles to be assigned to the selected steps.

▼ Selected Steps

No.	Title	State	Owner	Skill Category	Assignees
1	■ Create the production data sets	Unassigned		General	
2	■ (Optional) APF Authorize the Loadlib	Unassigned		System Programmer	

Total: 8

Available assignees

Actions ▼

No filter applied

Name	Type
☐ jerry	SAF user ID
☒ jerry2	SAF user ID
☐ z/OS Security Administrator	z/OSMF role
☐ z/OSMF Administrator	z/OSMF role
☐ z/OSMF User	z/OSMF role

Total: 5 Selected: 1

Buttons:

- Add >
- Add All >>
- < Remove
- << Remove All

* Assignees to be added:

jerry2

Comments:

☐ Send z/OSMF notifications to assignees (comments are not included on notifications)

OK Cancel

JERRY2 has been assigned to the steps that were checked (everything except step 3).

EXECUTE THE WORKFLOW

Assign Step 3 to
user JERRY.

Workflows

Workflows > Install the DTS Software suite of products. - Workflow_0 > Add Assignees

Settings | Help

Add Assignees

Select one or more SAF user IDs, SAF groups or z/OSMF roles to be assigned to the selected steps.

▼ Selected Steps

No.	Title	State	Owner	Skill Category	Assignees
2	Export the z/OSMF data set	Assigned		System Programmer	Jerry
3	(Optional) Add the DIF proc to PROCLIB	Unassigned		System Programmer	

Total: 9

Available assignees

Actions ▼

No filter applied

Name Filter	Type Filter
☒ jerry	SAF user ID
☐ jerry2	SAF user ID
☐ z/OS Security Administrator	z/OSMF role
☐ z/OSMF Administrator	z/OSMF role
☐ z/OSMF User	z/OSMF role

Total: 5 Selected: 1

Buttons: Add >, Add All >>, < Remove, << Remove All

* Assignees to be added:

Comments:

☒ Send z/OSMF notifications to assignees (comments are not included on notifications)

OK Cancel

EXECUTE THE WORKFLOW

I now accept ownership of the steps that were assigned to JERRY2.

Workflows

Install the DTS Software suite of products. - Workflow_0

Workflow Details

Workflow Steps

Actions

- Accept
- Perform
- Skip
- Status
- Override Complete
- Resolve Conflicts
- Change Called Workflow
- Assignment And Ownership
- FeedBack
- Expand
- Collapse
- Export Workflow as Printable Format
- Select All Steps Assigned to Me
- Start Parallel Automation
- Stop Automation
- Select All
- Deselect All
- Configure Columns...
- Hide Filter Row
- Clear Search
- Expand All
- Collapse All

	CalledWorkflow Filter	Automated Filter	Owner Filter	Skill Category Filter	Assignees Filter	Feedback status Filter
Create the production data sets		Yes		General	Jerry2	noFeedback
(Optional) APF Authorize the Loadlib data set		Yes		System Programmer	Jerry2	noFeedback
(Optional) Add the DIF proc to PROCLIB		Yes		System Programmer	Jerry	noFeedback
Copy members into the PARMLIB, ISPF, and RULE Libraries		Yes			Jerry2	noFeedback
(Optional) Copy modules into an APF authorized library		Yes			Jerry2	noFeedback
(Optional) Link DTS modules into an APF authorized library		Yes		Systems Programmer	Jerry2	noFeedback
(Optional) Implement ISPF interface		Yes			Jerry2	noFeedback
(Optional) Install LICENSE member		Yes			Jerry2	noFeedback
(Optional) Verify the installation		Yes			Jerry2	noFeedback

Total: 9 Selected: 8

Return to Workflows Refresh

Last refresh: Jul 5, 2023, 8:55:13 AM local time (Jul 5, 2023, 12:55:13 PM GMT)

EXECUTE THE WORKFLOW

I confirm that I
Accept these
steps.

Workflows

Workflows > Install the DTS Software suite of products. - Workflow_0

Install the DTS Software suite of products. - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions

No filter applied

State Filter	No. Filter	Title Filter
☒	Assigned	1 Create the production data sets
☒	Assigned	2 (Optional) APF Authorize the Load data set
☐	Assigned	3 (Optional) Add the DIF proc to PRO
☒	Assigned	4 Copy members into the PARMLIB, and RULE Libraries
☒	Assigned	5 (Optional) Copy modules into an APF authorized library
☒	Assigned	6 (Optional) Link DTS modules into an APF authorized library
☒	Assigned	7 (Optional) Implement ISPF interface
☒	Assigned	8 (Optional) Install LICENSE member
☒	Assigned	9 (Optional) Verify the installation

Total: 9 Selected: 8

Return to Workflows Refresh Last refresh: Jul 5, 2023, 8:55:13 AM local time (Jul 5, 2023, 12:55:13 PM GMT)

Accept Step

Selected Steps

Comments:

OK Cancel Help

Assignees Filter	Feedback status Filter
jerry2	noFeedback
jerry2	noFeedback
jerry	noFeedback
jerry2	noFeedback
jerry2	noFeedback
jerry2	noFeedback
jerry2	noFeedback
jerry2	noFeedback
jerry2	noFeedback
jerry2	noFeedback

EXECUTE THE WORKFLOW

So now JERRY2 is the Owner of everything except Step 3.

Workflows - Install the DTS Software suite of products. - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions Search ☐ All step content ?

No filter applied

State Filter	No. Filter	Title Filter	CalledWorkflow Filter	Automated Filter	Owner Filter	Skill Category Filter	Assignees Filter	Feedback status Filter
☒ Ready	1	Create the production data sets		Yes	jerry2	General	jerry2	noFeedback
☒ Not Ready	2	(Optional) APF Authorize the Loadlib data set		Yes	jerry2	System Programmer	jerry2	noFeedback
☐ Assigned	3	(Optional) Add the DIF proc to PROCLIB		Yes		System Programmer	jerry	noFeedback
☒ Not Ready	4	Copy members into the PARMLIB, ISPF, and RULE Libraries		Yes	jerry2		jerry2	noFeedback
☒ Not Ready	5	(Optional) Copy modules into an APF authorized library		Yes	jerry2		jerry2	noFeedback
☒ Not Ready	6	(Optional) Link DTS modules into an APF authorized library		Yes	jerry2	Systems Programmer	jerry2	noFeedback
☒ Not Ready	7	(Optional) Implement ISPF interface		Yes	jerry2		jerry2	noFeedback
☒ Not Ready	8	(Optional) Install LICENSE member		Yes	jerry2		jerry2	noFeedback
☒ Not Ready	9	(Optional) Verify the installation		Yes	jerry2		jerry2	noFeedback

Total: 9 Selected: 8

[Return to Workflows](#) [Refresh](#) Last refresh: Jul 5, 2023, 8:58:02 AM local time (Jul 5, 2023, 12:58:02 PM GMT)

EXECUTE THE WORKFLOW

Let's specify the values for the variables

Workflows

Install the DTS Software suite of products. - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions

No filter applied

State Filter	No. Filter	Title Filter	CalledWorkflow Filter	Automated Filter	Use RunAsUser ID Filter	Owner Filter	Skill Category Filter	Assignees Filter	Feedback status Filter
Ready		the production data sets		Yes		Jerry2	General	Jerry2	noFeedback
Not Ready		hal) APF Authorize the Loadlib		Yes		Jerry2	System Programmer	Jerry2	noFeedback
Assigned		hal) Add the DIF proc to PROCLIB		Yes			System Programmer	Jerry	noFeedback
Not Ready		members into the PARMLIB, ISPF, JLE Libraries		Yes		Jerry2		Jerry2	noFeedback
Not Ready		hal) Copy modules into an APF sized library		Yes		Jerry2		Jerry2	noFeedback
Not Ready		hal) Link DTS modules into an authorized library		Yes		Jerry2	Systems Programmer	Jerry2	noFeedback
Not Ready		hal) Implement ISPF interface		Yes		Jerry2		Jerry2	noFeedback
Not Ready		hal) Install LICENSE member		Yes		Jerry2		Jerry2	noFeedback
Not Ready	9	(Optional) Verify the installation		Yes		Jerry2		Jerry2	noFeedback

Total: 9 Selected: 1

Return to Workflows Refresh

Last refresh: Jul 7, 2023, 11:38:22 AM local time (Jul 7, 2023, 3:38:22 PM GMT)

EXECUTE THE WORKFLOW

Click on Perform

Workflows

Install the DTS Software suite of products. - Workflow_0 > 1. Create the production data sets

Settings | Help

Properties for Workflow Step 1. Create the production data sets

General

Details

Dependencies

Notes

Perform

Status

Input Variables

Feedback

Title:

Create the production data sets

Description:

This step creates the production data sets. It creates the following data sets: hlq \${version}.LOADLIB hlq \${version}.PARMLIB hlq \${version}.RULECKPT hlq \${version}.ISPFLIB hlq \${version}.RULELIB hlq \${version}.RPTLIB hlq \${version}.DIFVAR

Close

EXECUTE THE WORKFLOW

Workflows

Workflows > Install the DTS Software suite of products. - Workflow_0 > 1. Create the production data sets

Settings | Help

Properties for Workflow Step 1. Create the production data sets

General Details Dependencies Notes **Perform** Status Input Variables Feedback

✓ Input Variables
General
Review Instructions
Create JOB statement
Review JCL
Submit and Save JCL

Input Variables - General

Enter the variable values for this input category.

* Production High Level Qualifier: ⓘ The high level qualifier for production data sets.:
DTS

* Volume Serial for Install Data Sets: ⓘ - Install data sets will be allocated on this volume.:
XXXXXX

* Version Number: ⓘ - Version number:

* HLQ for distribution libraries: ⓘ - Distribution Libraries HLQ:
DTS

* Service level for the distribution libraries: ⓘ - SLxxxxx data set qualifier:

< Back Next > Save Finish Cancel

Close

Specify the values for the variables.

If I click on the question mark, I get additional information about the variable.

EXECUTE THE WORKFLOW

Workflows

Install the DTS Software suite of products. - Workflow_0 -> 1. Create the production data sets

Settings | Help

Properties for Workflow Step 1. Create the production data sets

General Details Dependencies Notes **Perform** Status Input Variables Feedback

Input Variables

General

Review Instructions

Create JOB statement

Review JCL

Submit and Save JCL

Input Variables - General

Enter the variable values for this input category.

* Production High Level Qualifier: ⓘ - The high level

* Volume Serial for Install Data Sets: ⓘ - Install data

XXXXXXXX

* Version Number: ⓘ - Version number

* HLQ for distribution libraries: ⓘ - Distribution Library

DTS

* Service level for the distribution libraries: ⓘ - SLxx

Production High Level Qualifier

This high level qualifier will be used for the production data sets. prodhlg.\$(version).LOADLIB prodhlg.\$(version).PARMLIB prodhlg.\$(version).RULECKPT prodhlg.\$(version).ISPF LIB prodhlg.\$(version).RULELIB prodhlg.\$(version).RPTLIB prodhlg.\$(version).DIFVAR With the exception of DIFVAR, all of these data sets are partitioned data sets. DIFVAR is a VSAM KSDS.

This variable is also referenced by the following steps:

State	No.	Title	Owner
Not Ready	2	APF Authorize the Loadlib data set	jerry2
Not Ready	4	Copy members into the PARMLIB, ISPF, and RULE Libraries	jerry2
Not Ready	5	Copy modules into an APF authorized library	jerry2
Not Ready	6	Link DTS modules into an APF authorized library	jerry2
Not Ready	7	Implement ISPF interface	jerry2
Not Ready	8	Install LICENSE member	jerry2
Not Ready	9	Verify the installation	jerry2

Close

< Back Next > Save Finish Cancel

Close

Here we have the:

- name of the variable,
- description of the variable specified in the workflow definition, &
- steps where the variable is referenced

EXECUTE THE WORKFLOW

The system can automatically validate input.

Workflows

Workflows > Install the DTS Software suite of products. - Workflow_0 > 1. Create the production data sets

Settings | Help

Properties for Workflow Step 1. Create the production data sets

General Details Dependencies Notes **Perform** Status Input Variables Feedback

✓ Input Variables

🔑 **General**

- Review Instructions
- Create JOB statement
- Review JCL
- Submit and Save JCL

Input Variables - General

Enter the variable values for this input category.

* Production High Level Qualifier: ⓘ - The high level qualifier
jg ⓘ IZUWF0082E: The value entered is not valid. Error details follow. The value must contain 1-8 uppercase alphabetic characters (A-Z), numeric characters (0-9), special characters (\$ # @), and hyphens. The first character must be an alphabetic or special character.

* Volume Serial for Install Data Sets: ⓘ - Install data sets will be allocated on this volume:
XXXXXXXX

* Version Number: ⓘ - Version number:

* HLQ for distribution libraries: ⓘ - Distribution Libraries HLQ:
DTS

* Service level for the distribution libraries: ⓘ - SLxxxxx data set qualifier:

< Back Next > Save Finish Cancel

Close

EXECUTE THE WORKFLOW

I specify the values that are needed to install our software.

Workflows

Workflows > Install the DTS Software suite of products. - Workflow_0 > 1. Create the production data sets

Settings | Help

Properties for Workflow Step 1. Create the production data sets

General Details Dependencies Notes **Perform** Status Input Variables Feedback

✓ Input Variables

General

Review Instructions

Create JOB statement

Review JCL

Submit and Save JCL

Input Variables - General

Enter the variable values for this input category.

* Production High Level Qualifier: ⓘ - The high level qualifier for production data sets.:
TESTDTS

* Volume Serial for Install Data Sets: ⓘ - Install data sets will be allocated on this volume:
DTS009

* Version Number: ⓘ - Version number:
R71

* HLQ for distribution libraries: ⓘ - Distribution Libraries HLQ:
DTS

* Service level for the distribution libraries: ⓘ - SLxxxxx data set qualifier:
SL23150

< Back Next > Save Finish Cancel

Close

EXECUTE THE WORKFLOW

Perform the first step. The workflow is designed so it can proceed from step to step without human intervention

Workflows

Install the DTS Software suite of products. - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions

No filter applied

State Filter	No. Filter	Title Filter	CalledWorkflow Filter	Automated Filter	Owner Filter	Skill Category Filter	Assignees Filter	Feedback status Filter
☒	1	Create the production data sets		Yes	jerry2	General	jerry2	noFeedback
☐	2	(Optional) APF Authorize the Loadlib		Yes	jerry2	System Programmer	jerry2	noFeedback
☐	3	(Optional) Add the DIF proc to PROCLIB		Yes		System Programmer	jerry	noFeedback
☐	4	Copy members into the PARMLIB, ISPF, and RULE Libraries		Yes	jerry2		jerry2	noFeedback
☐	5	(Optional) Copy modules into an APF authorized library		Yes	jerry2		jerry2	noFeedback
☐	6	(Optional) Link DTS modules into an APF authorized library		Yes	jerry2	Systems Programmer	jerry2	noFeedback
☐	7	(Optional) Implement ISPF interface		Yes	jerry2		jerry2	noFeedback
☐	8	(Optional) Install LICENSE member		Yes	jerry2		jerry2	noFeedback
☐	9	(Optional) Verify the installation		Yes	jerry2		jerry2	noFeedback

Total: 9 Selected: 1

Return to Workflows Refresh

Last refresh: Jul 5, 2023, 9:04:38 AM local time (Jul 5, 2023, 1:04:38 PM GMT)

EXECUTE THE WORKFLOW

Workflows > Install the DTS Software suite of products. - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions Search ☐ All step content ?

No filter applied

State Filter	No. Filter	Title Filter	CalledWorkflow Filter	Automated Filter	Owner Filter	Skill Category Filter	Assignees Filter	Feedback status Filter
☐ Complete	1	Create the production data sets		Yes	jerry2	General	jerry2	noFeedback
☐ Complete	2	(Optional) APF Authorize the Loadlib data set		Yes	jerry2	System Programmer	jerry2	noFeedback
☐ Assigned	3	(Optional) Add the DIF proc to PROCLIB		Yes		System Programmer	jerry	noFeedback
☐ Ready	4	Copy members into the PARMLIB, ISPF, and RULE Libraries		Yes	jerry2		jerry2	noFeedback
☐ Not Ready	5	(Optional) Copy modules into an APF authorized library		Yes	jerry2		jerry2	noFeedback
☐ Not Ready	6	(Optional) Link DTS modules into an APF authorized library		Yes	jerry2	Systems Programmer	jerry2	noFeedback
☐ Not Ready	7	(Optional) Implement ISPF interface		Yes	jerry2		jerry2	noFeedback
☐ Not Ready	8	(Optional) Install LICENSE member		Yes	jerry2		jerry2	noFeedback
☐ Not Ready	9	(Optional) Verify the installation		Yes	jerry2		jerry2	noFeedback

Total: 9 Selected: 0

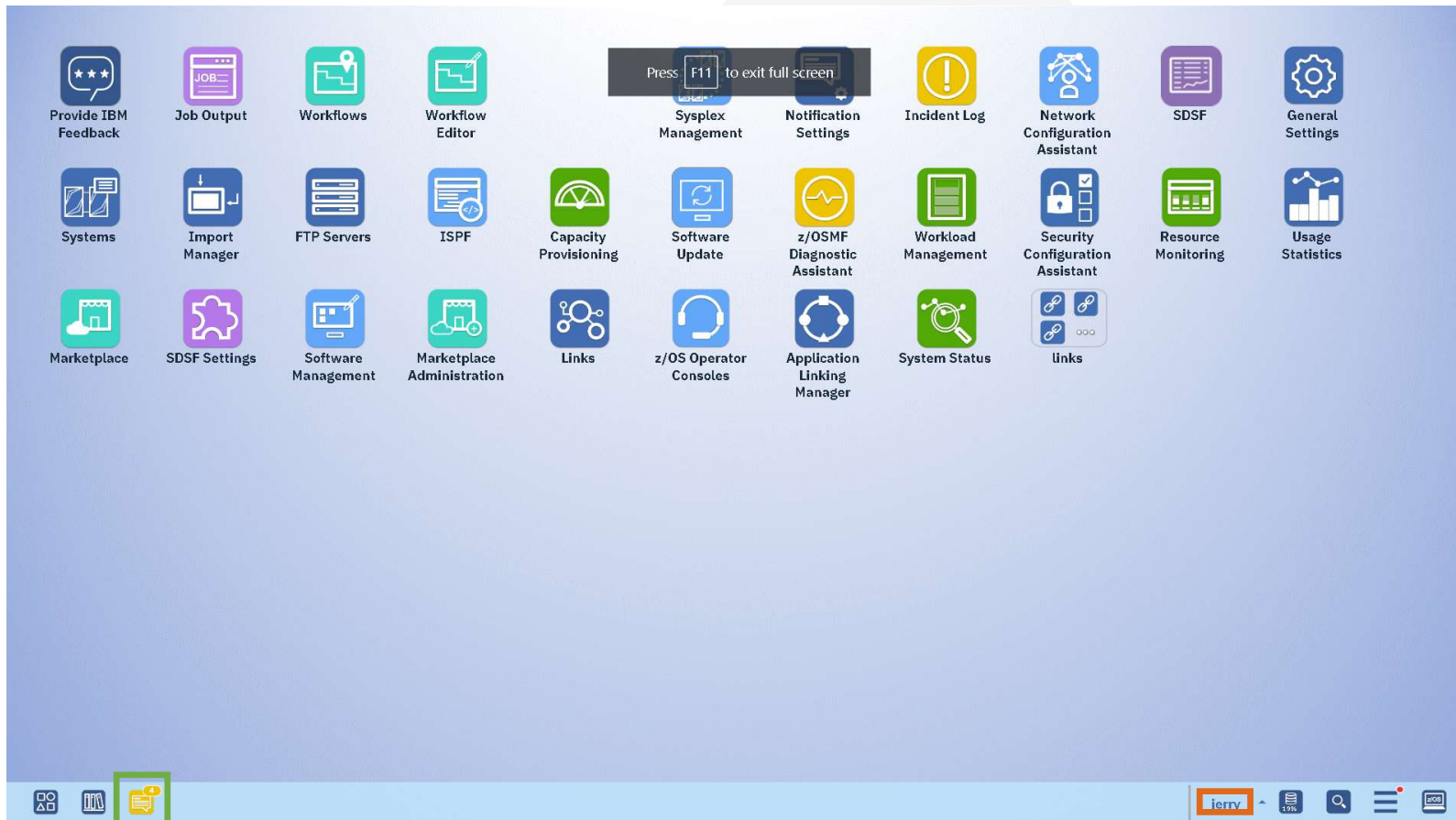
[Return to Workflows](#) [Refresh](#) Last refresh: Jul 5, 2023, 9:05:49 AM local time (Jul 5, 2023, 1:05:49 PM GMT)

Two steps run successfully, but the workflow stops at step 3.

WHY?

Because step 3 has been assigned to user JERRY but I am JERRY2.

EXECUTE THE WORKFLOW



JERRY needs to
sign into z/OSMF

We notice that he
has notifications!

EXECUTE THE WORKFLOW

Notifications

Notifications (1)

Actions ▾ Inbox ▾ New

No filter applied

Description Filter	From Filter	To Filter	Time Filter
☐ One or more steps in workflow "Install the DTS Software suite of products. - Workflow_0" have been assigned to you.	☐ Workflows	jerry	Jul 27, 2023, 9:35:56 AM

Total: 1 Selected: 0

Refresh Last refresh: Jul 27, 2023, 9:52:34 AM local time (Jul 27, 2023, 1:52:34 PM GMT)

This notification tells user JERRY that he has been assigned one or more steps in our workflow.

EXECUTE THE WORKFLOW

When he clicks on that notification, it takes us to the workflow.

Workflows

Install the DTS Software suite of products. - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions

No filter applied

Search

☐ All step content

☐ State Filter	No. Filter	Title Filter	CalledWorkflow Filter	Automated Filter	Use RunAsUser ID Filter	Owner Filter	Skill Category Filter	Assignees Filter	Feedback status Filter
☐ Complete	1	Create the production data sets		Yes		Jerry2	General	Jerry2	noFeedback
☐ Complete	2	(Optional) APF Authorize the Loadlib data set		Yes		Jerry2	System Programmer	Jerry2	noFeedback
☐ Assigned	3	(Optional) Add the DIF proc to PROCLIB		Yes			System Programmer	Jerry	noFeedback
☐ Ready	4	Copy members into the PARMLIB, ISPF, and RULE Libraries		Yes		Jerry2		Jerry2	noFeedback
☐ Not Ready	5	(Optional) Copy modules into an APF authorized library		Yes		Jerry2		Jerry2	noFeedback
☐ Not Ready	6	(Optional) Link DTS modules into an APF authorized library		Yes		Jerry2	Systems Programmer	Jerry2	noFeedback
☐ Not Ready	7	(Optional) Implement ISPF interface		Yes		Jerry2		Jerry2	noFeedback
☐ Not Ready	8	(Optional) Install LICENSE member		Yes		Jerry2		Jerry2	noFeedback
☐ Not Ready	9	(Optional) Verify the installation		Yes		Jerry2		Jerry2	noFeedback

Total: 9 Selected: 0

Return to Workflows

Refresh

Last refresh: Jul 7, 2023, 1:15:49 PM local time (Jul 7, 2023, 5:15:49 PM GMT)

EXECUTE THE WORKFLOW

User JERRY
must both
Accept and
Perform step
number 3.

Workflows

Install the DTS Software suite of products. - Workflow_0

Workflow Steps

State Filter	No. Filter	Title Filter	CalledWorkflow Filter	Automated Filter	Use RunAsUser ID Filter	Owner Filter	Skill Category Filter	Assignees Filter	Feedba Filter
Complete	1	Create the production data sets		Yes		jerry2	General	jerry2	noFeedt
Complete	2	(Optional) APF Authorize the Loadlib data set		Yes		jerry2	System Programmer	jerry2	noFeedt
Assigned	3	(Optional) Add the DIF proc to PROCLIB		Yes			System Programmer	jerry	noFeedt
Real		Copy members into the PARMLIB, ISPF, and RULE Libraries		Yes		jerry2		jerry2	noFeedt
Not R		(Optional) Copy modules into an APF authorized library		Yes		jerry2		jerry2	noFeedt
Not R		(Optional) Link DTS modules into an PF authorized library		Yes		jerry2	Systems Programmer	jerry2	noFeedt
Not R		(Optional) Implement ISPF interface		Yes		jerry2		jerry2	noFeedt
Not R		(Optional) Install LICENSE member		Yes		jerry2		jerry2	noFeedt
Not R		(Optional) Verify the installation		Yes		jerry2		jerry2	noFeedt

Total: 9 Selected: 1

Return to Workflows Refresh Last refresh: Jul 7, 2023, 5:30:03 PM local time (Jul 7, 2023, 9:30:03 PM GMT)

EXECUTE THE WORKFLOW

Workflows > Install the DTS Software suite of products. - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions Search ☐ All step content ?

No filter applied

State Filter	No. Filter	Title Filter	CalledWorkflow Filter	Automated Filter	Use RunAsUser ID Filter	Owner Filter	Skill Category Filter	Assignees Filter	Feedback status Filter
☐ Complete	1	Create the production data sets		Yes		jerry2	General	jerry2	noFeedback
☐ Complete	2	(Optional) APF Authorize the Loadlib data set		Yes		jerry2	System Programmer	jerry2	noFeedback
☒ Ready	3	(Optional) Add the DIF proc to PROCLIB		Yes		jerry	System Programmer	jerry	noFeedback
☐ Ready	4	Copy members into the PARMLIB, ISPF, and RULE Libraries		Yes		jerry2		jerry2	noFeedback
☐ Not Ready	5	(Optional) Copy modules into an APF authorized library		Yes		jerry2		jerry2	noFeedback
☐ Not Ready	6	(Optional) Link DTS modules into an APF authorized library		Yes		jerry2	Systems Programmer	jerry2	noFeedback
☐ Not Ready	7	(Optional) Implement ISPF interface		Yes		jerry2		jerry2	noFeedback
☐ Not Ready	8	(Optional) Install LICENSE member		Yes		jerry2		jerry2	noFeedback
☐ Not Ready	9	(Optional) Verify the installation		Yes		jerry2		jerry2	noFeedback

Total: 9 Selected: 1

[Return to Workflows](#) [Refresh](#) Last refresh: Jul 7, 2023, 5:31:57 PM local time (Jul 7, 2023, 9:31:57 PM GMT)

Once user JERRY accept2 step number 3, it is marked Ready...

EXECUTE THE WORKFLOW

... and user
JERRY can
Perform it.

Workflows

Install the DTS Software suite of products. - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions

No filter applied

State Filter	No. Filter	Title Filter	CalledWorkflow Filter	Automated Filter	Use RunAsUser ID Filter	Owner Filter	Skill Category Filter	Assignees Filter	Feedback status Filter
Complete	1	Create the production data sets		Yes		jerry2	General	jerry2	noFeedback
Complete	2	(Optional) APF Authorize the Loadlib data set		Yes		jerry2	System Programmer	jerry2	noFeedback
Re-run		(Optional) Add the DIF proc to PROCLIB		Yes		jerry	System Programmer	jerry	noFeedback
Accept		Copy members into the PARMLIB, ISPF, and RULE Libraries		Yes		jerry2		jerry2	noFeedback
Skip		(Optional) Copy modules into an APF authorized library		Yes		jerry2		jerry2	noFeedback
Override Complete		(Optional) Link DTS modules into an APF authorized library		Yes		jerry2	Systems Programmer	jerry2	noFeedback
Resolve Conflicts		(Optional) Implement ISPF interface		Yes		jerry2		jerry2	noFeedback
Change Called Workflow		(Optional) Install LICENSE member		Yes		jerry2		jerry2	noFeedback
Assignment And Ownership		(Optional) Verify the installation		Yes		jerry2		jerry2	noFeedback
FeedBack									
Expand									
Collapse									

Total: 9 Selected: 1

Return to Workflows Refresh

Last refresh: Jul 7, 2023, 5:31:57 PM local time (Jul 7, 2023, 9:31:57 PM GMT)

EXECUTE THE WORKFLOW

Step number 3
is now marked
Complete

Workflows

Install the DTS Software suite of products. - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions

No filter applied

State Filter	No. Filter	Title Filter	CalledWorkflow Filter	Automated Filter	Owner Filter	Skill Category Filter	Assignees Filter	Feedback status Filter
☐ Complete	1	Create the production data sets		Yes	jerry2	General	jerry2	noFeedback
☐ Complete	2	(Optional) APF Authorize the Loadlib data set		Yes	jerry2	System Programmer	jerry2	noFeedback
☒ Complete	3	(Optional) Add the DIF proc to PROCLIB		Yes	jerry	System Programmer	jerry	noFeedback
☐ Ready	4	Copy members into the PARMLIB, ISPF, and RULE Libraries		Yes	jerry2		jerry2	noFeedback
☐ Not Ready	5	(Optional) Copy modules into an APF authorized library		Yes	jerry2		jerry2	noFeedback
☐ Not Ready	6	(Optional) Link DTS modules into an APF authorized library		Yes	jerry2	Systems Programmer	jerry2	noFeedback
☐ Not Ready	7	(Optional) Implement ISPF interface		Yes	jerry2		jerry2	noFeedback
☐ Not Ready	8	(Optional) Install LICENSE member		Yes	jerry2		jerry2	noFeedback
☐ Not Ready	9	(Optional) Verify the installation		Yes	jerry2		jerry2	noFeedback

Total: 9 Selected: 1

Return to Workflows Refresh

Last refresh: Jul 5, 2023, 5:01:12 PM local time (Jul 5, 2023, 9:01:12 PM GMT)

EXECUTE THE WORKFLOW

The screenshot shows the IBM z/OSMF Workflows interface. A modal dialog titled "Perform Automated Step" is open, asking how to proceed with the selected step. The dialog offers three options: "Automatically perform the selected step, and all subsequent automated steps..." (selected), "Automatically perform the selected step only," and "Manually perform the selected step." Below these options, it asks "When input file variable conflicts occur:" and provides three choices: "Always use input file values..." (selected), "Always keep existing values..." (unselected), and "Allow step or workflow owner to choose..." (unselected). The background shows a workflow list with 9 steps, where step 4 is highlighted as "Ready".

State Filter	No. Filter	Title Filter
Complete	1	Create the production data sets
Complete	2	(Optional) APF Authorize the Loadlib data set
Complete	3	(Optional) Add the DIF proc to PROCLIB
Ready	4	Copy members into the PARMLIB, ISPF, and RULE Libraries
Not Ready	5	(Optional) Copy modules into an APF authorized library
Not Ready	6	(Optional) Link DTS modules into an APF authorized library
Not Ready	7	(Optional) Implement ISPF interface
Not Ready	8	(Optional) Install LICENSE member
Not Ready	9	(Optional) Verify the installation

So now user JERRY2 can perform the rest of the steps.

I have options:

1. Automatically perform the rest of the steps
2. Automatically perform the selected step only
3. Manually perform the selected step

EXECUTE THE WORKFLOW

The rest of the steps are successfully completed.

Mail - DTS H... IBM z/O... angular.m... angular - W... IBM -Z-zOS/... <mat-list>... TypeScript e... You're not u... node.js - Vis... Rexx Referen... z/OSMF Gull... z/OSMF Con... +

Not secure | https://192.168.0.247:10443/zosmf/

DTS Helpdesk DTS Admin ExaVault Rexx Functions z/OS Manuals Word Press Admin DTS Support Site z/OSMF ISPF Edit and Edit M... Introduction to IBM... ConvertWord and...

Workflows

Workflows > Install the DTS Software suite of products. - Workflow_0 [Settings](#) | [Help](#)

[Notes](#) | [History](#)

Workflow Details

Workflow Steps

Actions Search ☐ All step content ?

No filter applied

☐ State Filter	No. Filter	Title Filter	CalledWorkflow Filter	Automated Filter	Owner Filter	Skill Category Filter	Assignees Filter	Feedback status Filter
☐ Complete	1	Create the production data sets		Yes	jerry2	General	jerry2	noFeedback
☐ Complete	2	(Optional) APF Authorize the Loadlib data set		Yes	jerry2	System Programmer	jerry2	noFeedback
☐ Complete	3	(Optional) Add the DIF proc to PROCLIB		Yes	jerry	System Programmer	jerry	noFeedback
☐ Complete	4	Copy members into the PARMLIB, ISPF, and RULE Libraries		Yes	jerry2		jerry2	noFeedback
☐ Complete	5	(Optional) Copy modules into an APF authorized library		Yes	jerry2		jerry2	noFeedback
☐ Complete	6	(Optional) Link DTS modules into an APF authorized library		Yes	jerry2	Systems Programmer	jerry2	noFeedback
☐ Complete	7	(Optional) Implement ISPF interface		Yes	jerry2		jerry2	noFeedback
☐ Complete	8	(Optional) Install LICENSE member		Yes	jerry2		jerry2	noFeedback
☐ Complete	9	(Optional) Verify the installation		Yes	jerry2		jerry2	noFeedback

Total: 9 Selected: 0

[Return to Workflows](#) [Refresh](#) Last refresh: Jul 5, 2023, 5:04:31 PM local time (Jul 5, 2023, 9:04:31 PM GMT)

EXECUTE THE WORKFLOW

Let's take
another step on
our journey.

We can specify
the variable
values in an
input file.

Workflows

Settings | Help

Workflows

Simplifies tasks through guided step-based workflows, and provides administrative functions for assigning workflow responsibilities and tracking progress.

Actions ▾ Active ▾

No filter applied

Workflow Name Filter	Description Filter	Version Filter	Vendor Filter	Access Filter	Owner Filter	System Filter	Status	Percent Complete	Date Created(GMT) Filter
There is no data to display.									

Create Workflow

* Location (system) of definition and variable input files:
ADCDPL.S0W1 (S0W1)

* Workflow definition file: ?
JERRY.WORKFLOW.PDS(AUTOINST)

Workflow variable input file: ?
JERRY.WORKFLOW.PDS(VAR2DEFN)

< Back Next> Finish Cancel Help

Total: 0 Selected: 0

Refresh Last refresh: Jul 18, 2023, 9:09:02 AM local time (Jul 18, 2023, 1:09:02 PM GMT)

EXECUTE THE WORKFLOW

Workflows

Simplifies tasks through guided step-based workflows, and provides administrative functions for assigning workflow responsibilities and tracking progress.

Actions ▾ Active ▾

No filter applied

Workflow Name Filter	Description Filter
-------------------------	-----------------------

Create Workflow

Location (system) of definition and variable input files:
ADCDPL.S0W1 (S0W1)

Workflow definition file:
JERRY.WORKFLOW.PDS(AUTOINST)

Variable input file:
JERRY.WORKFLOW.PDS(VAR2DEFN)

Description:
Install the DTS Software suite of products.

Vendor: DTS Software Version: 7.1 Is Callable: ?
In the same system

* Workflow name:
Install the DTS Software suite of products. - Workflow_0

* Owner user ID: jerry2 Archive SAF ID: ? jerry2 * System (where workflow steps will be performed): ADCDPL.S0W1 (S0W1)

Comments:

* Access(Learn More):
Public

☒ Save jobs output
Jobs output directory: ?
/usr/jerry/installjobs

☒ Open workflow on finish ☒ Assign all steps to owner user ID ☐ Delete workflow on completion

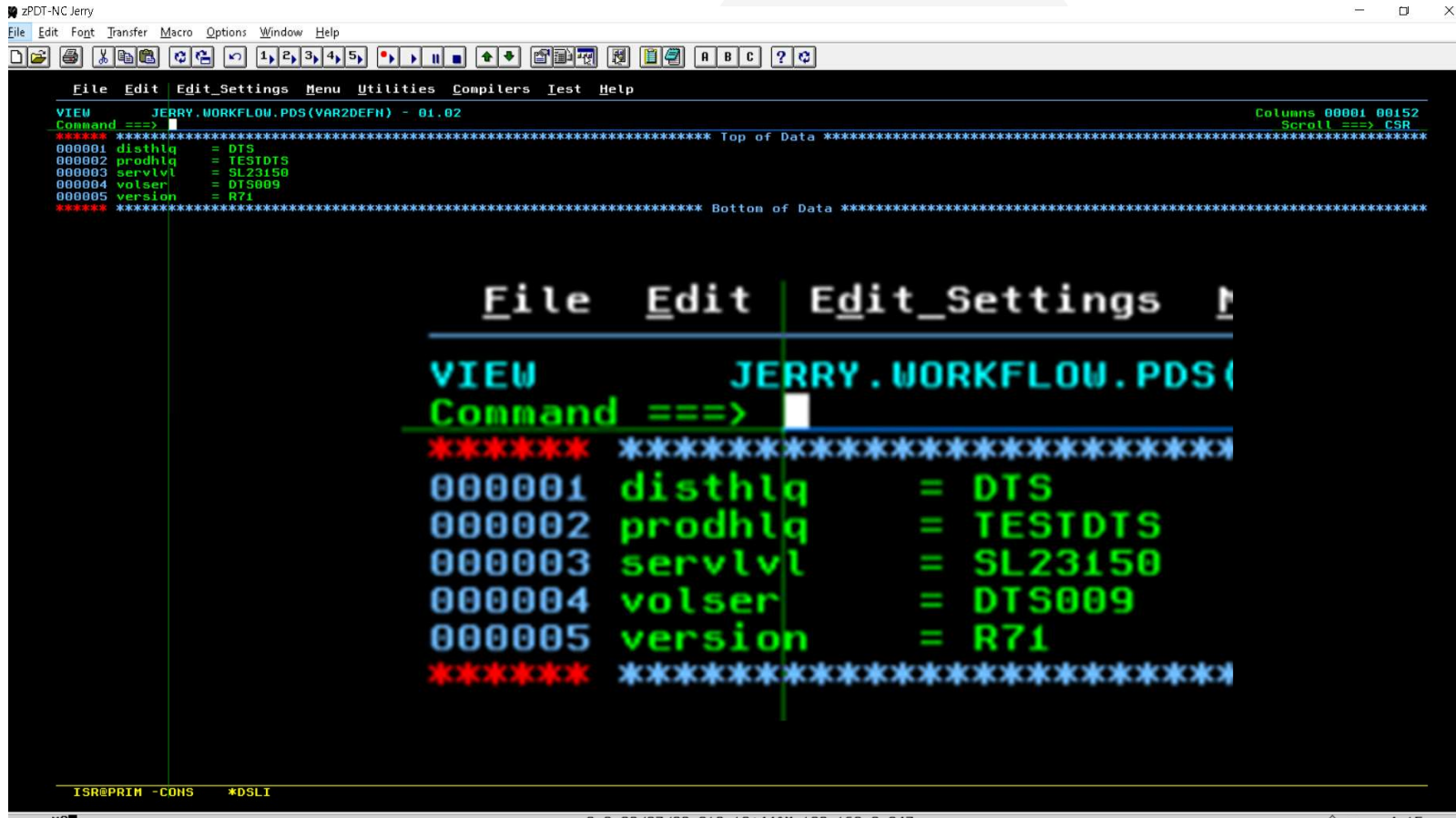
< Back Next > Finish Cancel Help

Total: 0 Selected: 0

Refresh Last refresh: Jul 18, 2023, 9:09:02 AM local time (Jul 18, 2023, 1:09:02 PM GMT)

For this scenario, I assigned all the steps to myself because I have the power to do everything that needs to be done.

EXECUTE THE WORKFLOW



```
zPDT-NC Jerry
File Edit Font Transfer Macro Options Window Help
File Edit Edit_Settings Menu Utilities Compilers Test Help
VIEW JERRY.WORKFLOW.PDS(VAR2DEFN) - 01.02 Columns 00001 00152
Command ==>
***** Top of Data *****
000001 disthlq = DTS
000002 prodhlq = TESTDTS
000003 servlvl = SL23150
000004 volser = DTS009
000005 version = R71
***** Bottom of Data *****

File Edit Edit_Settings
VIEW JERRY.WORKFLOW.PDS
Command ==>
*****
000001 disthlq = DTS
000002 prodhlq = TESTDTS
000003 servlvl = SL23150
000004 volser = DTS009
000005 version = R71
*****
ISR@PRIM -CONS *DSLI
```

These are the variables and their values.

I specified values for all the variables so the workflow will run.

EXECUTE THE WORKFLOW

Workflows

Install the DTS Software suite of products. - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions

No filter applied

State Filter	No. Filter	Title Filter	CalledWorkflow Filter	Automated Filter	Use RunAsUser ID Filter	Owner Filter	Skill Category Filter	Assignees Filter	Feedback status Filter
☐ Complete	1	Create the production data sets		Yes		Jerry2	General	Jerry2	noFeedback
☐ Complete	2	(Optional) APF Authorize the Loadlib data set		Yes		Jerry2	System Programmer	Jerry2	noFeedback
☐ Complete	3	(Optional) Add the DIF proc to PROCLIB		Yes		Jerry2	System Programmer	Jerry2	noFeedback
☐ Submitted	4	Copy members into the PARMLIB, ISPF, and RULE Libraries		Yes		Jerry2		Jerry2	noFeedback
☐ Not Ready	5	(Optional) Copy modules into an APF authorized library		Yes		Jerry2		Jerry2	noFeedback
☐ Not Ready	6	(Optional) Link DTS modules into an APF authorized library		Yes		Jerry2	Systems Programmer	Jerry2	noFeedback
☐ Not Ready	7	(Optional) Implement ISPF interface		Yes		Jerry2		Jerry2	noFeedback
☐ Not Ready	8	(Optional) Install LICENSE member		Yes		Jerry2		Jerry2	noFeedback
☐ Not Ready	9	(Optional) Verify the installation		Yes		Jerry2		Jerry2	noFeedback

Total: 9 Selected: 0

[Return to Workflows](#) [Refresh](#) Last refresh: Jul 18, 2023, 9:17:12 AM local time (Jul 18, 2023, 1:17:12 PM GMT)

I clicked on Perform for the first step

I click Refresh to show the Workflow making its progress

EXECUTE THE WORKFLOW

More progress

Workflows

Install the DTS Software suite of products. - Workflow_0

Settings | Help

Workflow Details

Workflow Steps

Actions

No filter applied

State Filter	No. Filter	Title Filter	CalledWorkflow Filter	Automated Filter	Use RunAsUser ID Filter	Owner Filter	Skill Category Filter	Assignees Filter	Feedback status Filter
☐	Complete	1	Create the production data sets	Yes		jerry2	General	jerry2	noFeedback
☐	Complete	2	(Optional) APF Authorize the Loadlib data set	Yes		jerry2	System Programmer	jerry2	noFeedback
☐	Complete	3	(Optional) Add the DIF proc to PROCLIB	Yes		jerry2	System Programmer	jerry2	noFeedback
☐	Complete	4	Copy members into the PARMLIB, ISPF, and RULE Libraries	Yes		jerry2		jerry2	noFeedback
☐	Complete	5	(Optional) Copy modules into an APF authorized library	Yes		jerry2		jerry2	noFeedback
☐	Ready	6	(Optional) Link DTS modules into an APF authorized library	Yes		jerry2	Systems Programmer	jerry2	noFeedback
☐	Not Ready	7	(Optional) Implement ISPF interface	Yes		jerry2		jerry2	noFeedback
☐	Not Ready	8	(Optional) Install LICENSE member	Yes		jerry2		jerry2	noFeedback
☐	Not Ready	9	(Optional) Verify the installation	Yes		jerry2		jerry2	noFeedback

Total: 9 Selected: 0

Return to Workflows

Refresh

Last refresh: Jul 18, 2023, 9:17:31 AM local time (Jul 18, 2023, 1:17:31 PM GMT)

EXECUTE THE WORKFLOW

Workflow
successfully
completes
without human
intervention.

Workflows

Install the DTS Software suite of products. - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions

No filter applied

State Filter	No. Filter	Title Filter	CalledWorkflow Filter	Automated Filter	Use RunAsUser ID Filter	Owner Filter	Skill Category Filter	Assignees Filter	Feedback status Filter
☐ Complete	1	Create the production data sets		Yes		Jerry2	General	Jerry2	noFeedback
☐ Complete	2	(Optional) APF Authorize the Loadlib data set		Yes		Jerry2	System Programmer	Jerry2	noFeedback
☐ Complete	3	(Optional) Add the DIF proc to PROCLIB		Yes		Jerry2	System Programmer	Jerry2	noFeedback
☐ Complete	4	Copy members into the PARMLIB, ISPF, and RULE Libraries		Yes		Jerry2		Jerry2	noFeedback
☐ Complete	5	(Optional) Copy modules into an APF authorized library		Yes		Jerry2		Jerry2	noFeedback
☐ Complete	6	(Optional) Link DTS modules into an APF authorized library		Yes		Jerry2	Systems Programmer	Jerry2	noFeedback
☐ Complete	7	(Optional) Implement ISPF interface		Yes		Jerry2		Jerry2	noFeedback
☐ Complete	8	(Optional) Install LICENSE member		Yes		Jerry2		Jerry2	noFeedback
☐ Complete	9	(Optional) Verify the installation		Yes		Jerry2		Jerry2	noFeedback

Total: 9 Selected: 0

Return to Workflows Refresh

Last refresh: Jul 18, 2023, 9:18:12 AM local time (Jul 18, 2023, 1:18:12 PM GMT)



AN EVEN MORE COMPLEX WORKFLOW

AN EVEN MORE COMPLEX WORKFLOW

Workflow Editor

Edit Workflow Definition

☐ Create New Workflow

☒ Open Existing Workflow

Type or enter name of the workflow definition file and, optionally, the variable input file. For each value, specify a sequential data set, a member of a partitioned data set (PDS), or a z/OS UNIX path and file name.

☐ Edit raw text of workflow definition

* Workflow definition file:

JERRY.WORKFLOW.PDS(TESTQA)

Workflow variable input file:

Select or type

OK Cancel Help

This is a different workflow from the previous one.

It demonstrates steps that are composites of other steps as well as a workflow calling another workflow

AN EVEN MORE COMPLEX WORKFLOW

Each step shown is a composite of other steps.

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(TESTQA)

Metadata Steps Variables Feedback Input Properties

A workflow is composed of one or more units of work called steps. A workflow definition file must contain at least one step, each step can contain substeps. On this tab, you can launch actions to view or modify the steps in the selected workflow definition.

Actions Create Step Search

Step No.	Name	Title	Signature Status
1	Install_Products_for_QA	Install Products	
2	Installation_Verification	Installation Verification	
3	Test_Cases	Test Cases	

Total: 12 Selected: 0

Save Save As... Test Cancel

AN EVEN MORE COMPLEX WORKFLOW

Step 1 is a composite of six other steps

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(TESTQA)

Metadata Steps Variables Feedback Input Properties

A workflow is composed of one or more units of work called steps. A workflow definition file must contain at least one step, each step can contain substeps. On this tab, you can launch actions to view or modify the steps in the selected workflow definition.

Actions Create Step Search

Step No.	Name	Title	Signature Status
1	Install_Products_for_QA	Install Products	
1.1	Stop_DIF_STC	Stop DIF STC	N/A
1.2	Delete_Run_Datasets	Delete Run Datasets	N/A
1.3	Execute_Install_Steps	Automatically execute all of the Install steps	N/A
1.4	Create_DSL_Database	Create DSL Database	N/A
1.5	Create_IVP_Rules	Create IVP RULES	N/A
1.6	Move_LICENSE_and_STARTxx_Members	Move LICENSE and STARTxx Members	N/A
2	Installation_Verification	Installation Verification	
3	Test_Cases	Test Cases	

Total: 12 Selected: 0

Save Save As... Test Cancel

AN EVEN MORE COMPLEX WORKFLOW

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(TESTQA)

Metadata Steps Variables Feedback Input Properties

A workflow is composed of one or more units of work called steps. A workflow definition file must contain at least one step, each step can contain substeps. On this tab, you can launch actions to view or modify the steps in the selected workflow definition.

Step No.	Name	Title	Signature Status
1	Install_Products_for_QA	Install Products	
1.1	Stop_DIF_STC	Stop DIF STC	N/A
1.2	Delete_Run_Datasets	Delete Run Datasets	N/A
1.3	Execute_Install_Steps	Automatically execute all of the install steps	N/A
1.4	Create_DSL_Database	Create DSL Database	N/A
1.5	Create_IVP_Rules	Create IVP RULES	N/A
1.6	Move_LICENSE_and_STARTxx_Members	Move LICENSE and STARTxx Members	N/A
2	Installation_Verification	Installation Verification	
3	Test_Cases	Test Cases	

Total: 12 Selected: 1

Save Save As... Test Cancel

Variable Details

Step Details

Overview Prerequisites Instructions **Type** Conditions Security Variables Feedback

Template Contents

The step type indicates the type of processing that the step performs. On this tab, you can modify the related details.

Step Type: Calling Step

Call Workflow By: name (ID/Version)

* Workflow ID: Install_DTS_Product_Suite Workflow Version: 7.1

Workflow Definition File: JERRY.WORKFLOW.PDS(AUTOINST)

☐ File path contains substitution

Workflow Variable Input File:

☐ File path contains substitution

* Workflow Description: Install the DTS Software suite of products.

☒ Transfer variable values from this workflow to the called workflow

Help

But step 1.3 is even more intriguing. It calls the workflow we examined earlier.

Looking at the **Type** definition, we see the **Step Type** is **Calling Step**.

The **Workflow Definition File** is the file we looked at earlier. So those nine (9) steps will be executed when we run this workflow.

AN EVEN MORE COMPLEX WORKFLOW

Workflow Editor

Workflow Definition: JERRY.WORKFLOW.PDS(TESTQA)

Metadata Steps Variables Feedback Input Properties

A workflow is composed of one or more units of work called steps. A workflow definition file must contain at least one step, each step can contain substeps. On this tab, you can launch actions to view or modify the steps in the selected workflow definition.

Step No.	Name	Title	Signature Status
1	Install_Products_for_QA	Install Products	
1.1	Stop_DIF_STC	Stop DIF STC	N/A
1.2	Delete_Run_Datasets	Delete Run Datasets	N/A
1.3	Execute_Install_Steps	Automatically execute all of the install steps	N/A
1.4	Create_DSL_Database	Create DSL Database	N/A
1.5	Create_IVP_Rules	Create IVP RULES	N/A
1.6	Move_LICENSE_and_STARTxx_Members	Move LICENSE and STARTxx Members	N/A
2	Installation_Verification	Installation Verification	
3	Test_Cases	Test Cases	

Total: 12 Selected: 1

Save Save As... Test Cancel

Variable Details

Step Details

Overview Prerequisites Instructions **Type** Conditions Security Variables Feedback

☒ Transfer variable values from this workflow to the called workflow

Regular Expressions:

Add Expression

Remove

Variables to be Transferred to Called Workflow Table

Variable Name	Map To
scchliq	prodhliq
volser	volser
sccsl	servM
sccover	version

Total: 5 Selected: 0

☐ Transfer variable values from the called workflow to this workflow

Help

Still in the **Type** tab, scroll forward, click **Transfer variable values from this workflow ...**

Map the variable names in the calling workflow to the variable names in the called workflow

AN EVEN MORE COMPLEX WORKFLOW

Let's run this workflow!

Workflows

Settings | Help

Workflows

Simplifies tasks through guided step-based workflows, and provides administrative functions for assigning workflow responsibilities and tracking progress.

Actions

Active

View Properties

Open

Modify...

Cancel

Delete

Archive...

Stop Automation

Generate Feedback Summary

Create New Based on Existing

Reactivate...

Update Workflow Steps

Create Workflow...

Customize JOB Statement

Workflows View

Select All

Deselect All

Configure Columns...

Hide Filter Row

Clear Sorts

Clear Search

Search

Description	Version	Vendor	Access	Owner	System	Status	Percent Complete	Date Created(GMT)
Filter	Filter	Filter	Filter	Filter	Filter			Filter
There is no data to display.								

Total: 0 Selected: 0

Refresh

Last refresh: Jul 10, 2023, 2:00:55 PM local time (Jul 10, 2023, 8:00:55 PM GMT)

AN EVEN MORE COMPLEX WORKFLOW

Pass in the
variable values.

Workflows

Settings | Help

Workflows

Simplifies tasks through guided step-based workflows, and provides administrative functions for assigning workflow responsibilities and tracking progress.

Actions ▾ Active ▾

No filter applied

Workflow Name Filter	Description Filter	Version Filter	Vendor Filter	Access Filter	Owner Filter	System Filter	Status	Percent Complete	Date Created(GMT) Filter
There is no data to display.									

Create Workflow

* Location (system) of definition and variable input files:
ADCDPL.S0W1 (S0W1)

* Workflow definition file: ?
JERRY.WORKFLOW.PDS(TESTQA)

Workflow variable input file: ?
JERRY.WORKFLOW.PDS(VAR4QA)

< Back Next> Finish Cancel Help

Total: 0 Selected: 0

Refresh Last refresh: Jul 10, 2023, 2:00:55 PM local time (Jul 10, 2023, 6:00:55 PM GMT)

AN EVEN MORE COMPLEX WORKFLOW

Variable values
for the workflow.

```
VIEW JERRY.WORKFLOW.PDS(VAR4QA) - 01.00
Command ==>
***** Top of Data *****
000001 sccdhlq = DTS
000002 sccdif = JERR3DIF
000003 scchlq = TESTDTS
000004 sccsl = SL23150
000005 volser = DTS009
000006 sccver = R71
***** Bottom of Data *****

File Edit Edit_Settings Menu

VIEW JERRY.WORKFLOW.PDS(VAR4Q
Command ==>
*****
000001 sccdhlq = DTS
000002 sccdif = JERR3DIF
000003 scchlq = TESTDTS
000004 sccsl = SL23150
000005 volser = DTS009
000006 sccver = R71
*****

ISR@PRIM -CONS *DSLI
```

AN EVEN MORE COMPLEX WORKFLOW

Assign all steps
to myself.

Workflows

Simplifies tasks through guided step-based workflows, and provides administrative functions for assigning workflow responsibilities and tracking progress.

Actions ▾ Active ▾

No filter applied

Workflow Name Filter	Description Filter
-------------------------	-----------------------

Create Workflow

Location (system) of definition and variable input files:
ADCDPL.S0W1 (S0W1)

Workflow definition file:
JERRY.WORKFLOW.PDS(TESTQA)

Variable input file:
JERRY.WORKFLOW.PDS(VAR4QA)

Description:
Run QA for SCC product line

Vendor: DTS Software Version: 7.1 Is Callable: ?
Cannot be called by another workflow

* Workflow name:
Run QA for SCC product line - Workflow_0

* Owner user ID: jerry2 Archive SAF ID: jerry2 * System (where workflow steps will be performed): ADCDPL.S0W1 (S0W1)

Comments:

* Access(Learn More):
Public

☐ Save jobs output

☒ Open workflow on finish ☒ Assign all steps to owner user ID ☐ Delete workflow on completion

< Back Next > Finish Cancel Help

Total: 0 Selected: 0

Refresh Last refresh: Jul 10, 2023, 2:00:55 PM local time (Jul 10, 2023, 6:00:55 PM GMT)

AN EVEN MORE COMPLEX WORKFLOW

Run the workflow!

Workflows

Run QA for SCC product line - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions

Search

All step content

No filter applied

State Filter	No. Filter	Title Filter	CalledWorkflow Filter	Automated Filter	Use RunAsUser ID Filter	Owner Filter	Skill Category Filter	Assignees Filter	Feedback status Filter
In Progress	1	Install Products							noFeedback
Ready	1.1	Stop DIF STC		Yes		jerry2		jerry2	noFeedback
Ready	1.2	Delete Run Datasets		Yes		jerry2		jerry2	noFeedback
Not Ready	1.3	Automatically execute all of the install steps		Yes		jerry2		jerry2	noFeedback
Not Ready	1.4	Create DSL Database		Yes		jerry2		jerry2	noFeedback
Ready	1.5	Create NP RULES		Yes		jerry2		jerry2	noFeedback
Ready	1.6	Move LICENSE and STARTxx Members		Yes		jerry2		jerry2	noFeedback
In Progress	2	Installation Verification							noFeedback
In Progress	3	Test Cases							noFeedback

Total: 12 Selected: 1

Return to Workflows

Refresh

Last refresh: Jul 10, 2023, 2:02:05 PM local time (Jul 10, 2023, 6:02:05 PM GMT)

AN EVEN MORE COMPLEX WORKFLOW

More running...

Workflows

Run QA for SCC product line - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions

No filter applied

State Filter	No. Filter	Title Filter
In Progress	1	Install Products
Ready	1.1	Stop DIF STC
Ready	1.2	Delete Run Datasets
Not Ready	1.3	Automatically execute all of the Install steps
Not Ready	1.4	Create DSL Database
Ready	1.5	Create IVP RULES
Ready	1.6	Move LICENSE and STARTxx Members
In Progress	2	Installation Verification
In Progress	3	Test Cases

Total: 12 Selected: 1

Return to Workflows Refresh Last refresh: Jul 10, 2023, 2:02:05 PM local time (Jul 10, 2023, 6:02:05 PM GMT)

Perform Automated Step

The selected step can be performed automatically. How would you like to proceed?

☒ Automatically perform the selected step, and all subsequent automated steps, according to their declared step dependencies, until one of the following occurs:

- all workflows steps have been completed.
- a non-automated, non-Complete step, is reached, or
- an error occurs.

☐ Automatically perform the selected step only.

☐ Manually perform the selected step.

When input file variable conflicts occur:

☒ Always use input file values. Existing values will be overwritten and automation will continue.

☐ Always keep existing values. Input file values will be ignored and automation will continue.

☐ Allow step or workflow owner to choose whether the input file value or existing value should be used for each conflicting variable. Automation will be stopped.

OK Cancel Help

AN EVEN MORE COMPLEX WORKFLOW

Running merrily
along ...

Workflows

Run QA for SCC product line - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions

No filter applied

State Filter

No. Filter

Title Filter

CalledWorkflow Filter

Automated Filter

Use RunAsUser ID Filter

Owner Filter

Skill Category Filter

Assignees Filter

Feedback status Filter

☐	In Progress	1	Install Products							noFeedback
☐	Complete	1.1	Stop DIF STC		Yes		jerry2		jerry2	noFeedback
☐	Complete	1.2	Delete Run Datasets		Yes		jerry2		jerry2	noFeedback
☐	In Progress	1.3	Automatically execute all of the Install steps	Install the DTS Software suite of products - Workflow_0	Yes		jerry2		jerry2	noFeedback
☐	Not Ready	1.4	Create DSL Database		Yes		jerry2		jerry2	noFeedback
☐	Ready	1.5	Create IVP RULES		Yes		jerry2		jerry2	noFeedback
☐	Ready	1.6	Move LICENSE and STARTx Members		Yes		jerry2		jerry2	noFeedback
☐	In Progress	2	Installation Verification							noFeedback
☐	In Progress	3	Test Cases							noFeedback

Total: 12 Selected: 0

Return to Workflows Refresh

Last refresh: Jul 10, 2023, 2:03:56 PM local time (Jul 10, 2023, 6:03:56 PM GMT)

AN EVEN MORE COMPLEX WORKFLOW

... and running

Workflows

Run QA for SCC product line - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions

No filter applied

State Filter

No. Filter

Title Filter

CalledWorkflow Filter

Automated Filter

Use RunAsUser ID Filter

Owner Filter

Skill Category Filter

Assignees Filter

Feedback status Filter

☐	Complete	1	Install Products							noFeedback
☐	Complete	1.1	Stop DIF STC		Yes		jerry2		jerry2	noFeedback
☐	Complete	1.2	Delete Run Datasets		Yes		jerry2		jerry2	noFeedback
☐	Complete	1.3	Automatically execute all of the Install steps	Install the DTS Software suite of products - Workflow_0	Yes		jerry2		jerry2	noFeedback
☐	Complete	1.4	Create DSL Database		Yes		jerry2		jerry2	noFeedback
☐	Complete	1.5	Create IVP RULES		Yes		jerry2		jerry2	noFeedback
☐	Complete	1.6	Move LICENSE and STARTx Members		Yes		jerry2		jerry2	noFeedback
☐	In Progress	2	Installation Verification							noFeedback
☐	In Progress	3	Test Cases							noFeedback

Total: 12 Selected: 0

Return to Workflows Refresh

Last refresh: Jul 10, 2023, 2:04:32 PM local time (Jul 10, 2023, 6:04:32 PM GMT)

AN EVEN MORE COMPLEX WORKFLOW

Workflow
successfully
completed!

Workflows

Run QA for SCC product line - Workflow_0

Settings | Help

Notes | History

Workflow Details

Workflow Steps

Actions

No filter applied

State Filter

No. Filter

Title Filter

CalledWorkflow Filter

Automated Filter

Use RunAsUser ID Filter

Owner Filter

Skill Category Filter

Assignees Filter

Feedback status Filter

☐	Complete	1	Install Products							noFeedback
☐	Complete	1.1	Stop DIF STC		Yes		jerry2		jerry2	noFeedback
☐	Complete	1.2	Delete Run Datasets		Yes		jerry2		jerry2	noFeedback
☐	Complete	1.3	Automatically execute all of the Install steps	Install the DTS Software suite of products - Workflow_0	Yes		jerry2		jerry2	noFeedback
☐	Complete	1.4	Create DSL Database		Yes		jerry2		jerry2	noFeedback
☐	Complete	1.5	Create IVP RULES		Yes		jerry2		jerry2	noFeedback
☐	Complete	1.6	Move LICENSE and STARTx Members		Yes		jerry2		jerry2	noFeedback
☐	Complete	2	Installation Verification							noFeedback
☐	Complete	3	Test Cases							noFeedback

Total: 12 Selected: 0

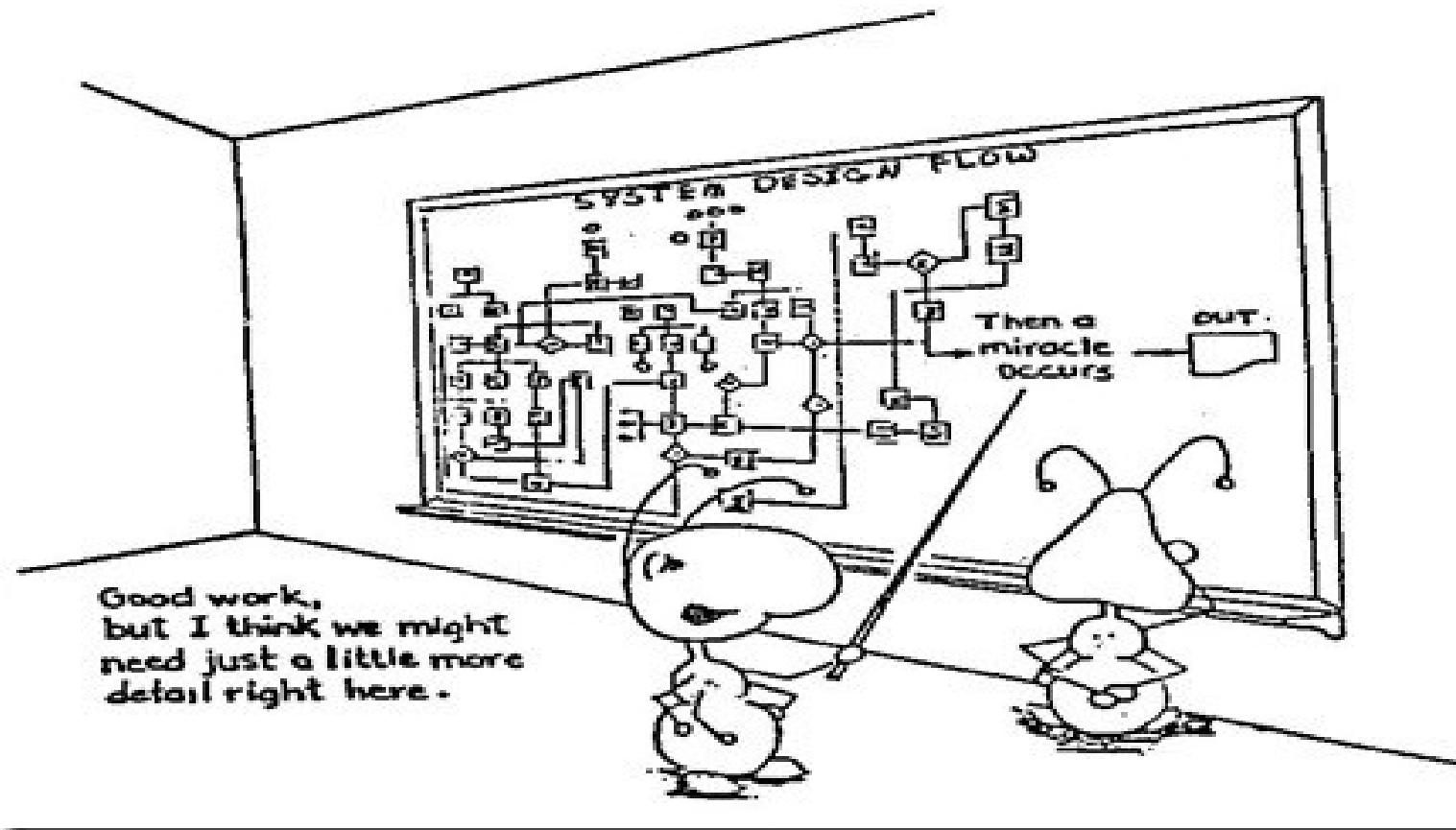
Return to Workflows Refresh

Last refresh: Jul 10, 2023, 2:04:48 PM local time (Jul 10, 2023, 6:04:48 PM GMT)



“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”



Input for the installation is critical.

I was always subconsciously alarmed that I didn't know how to create a package that z/OSMF could use.

At the last SHARE, I found the answer.

Portable SoftWare Instances

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”



You must create a Software instance **BEFORE** you can create a **PORTABLE** Software Instance.

Both instances can be created by double clicking on Software Management.

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Software Management

Software Management

Use this task to view details about your software inventory, including related products, features, FMIDs, data sets, deployments, and SYSMODs. [Learn more...](#)

Software Instances	Define your software to z/OSMF; deploy software; generate reports about your software.
Portable Software Instances	Define your portable software instances to z/OSMF.
Products	View a consolidated list of the products included in each software instance.
Deployments	Deploy a software instance, and manage existing deployments.
Categories	Create new categories for your software instances and deployments, and manage existing categories.
Settings	Select the time zone in which to display date and time data. Indicate whether to display or suppress information messages.

Software Instances can create both:

- Software Instance &
- Portable Software Instance

There are other options here, but we click Software Instances to start.

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Software Management > Software Instances

Software Instances

Switch To: ▾

Actions ▾

No filter applied

Name Filter	System Filter	Messages Filter	Description Filter	Activity Filter	Global Zone CSI Filter	Target Zones Filter	Categories Filter	Product, Feature, and FMD Information Retrieved (Local) Filter	Last Modified (Local) Filter
☐ AFF260	S0W1		VS FORTRAN COMPLIB/DEBUG 2.6.0		AFF260.GLOBAL.CSI	AFF260T		May 13, 2022, 8:54:35 AM	Feb 16, 2018, 5:07:59 PM
☐ AGG710	S0W1		IBM HOURGLASS V7.1.0		AGG710.GLOBAL.CSI	AGG710T		May 13, 2022, 8:54:33 AM	Feb 16, 2018, 5:13:51 PM
☐ AUT350	S0W1		IBM Tivoli System Automation for z/OS 3.5.0		AUT350.GLOBAL.CSI	AUT350T		Feb 16, 2018, 5:31:32 PM	Feb 19, 2018, 2:13:53 PM
☐ BAQ300	S0W1		IBM z/OS Connect Enterprise Edition Continuous Delivery V3.0		BAQ300.GLOBAL.CSI	BAQ300T		May 13, 2022, 8:54:33 AM	Feb 16, 2018, 5:40:34 PM
☐ ADBB20	S0W1		DB2 Administration Tool for z/OS V11.11.02.00 DB2 Object Comparison Tool for z/OS V11.11.02.00 IBM Tools Base for z/OS 01.05.00		ADBB20.GLOBAL.CSI	ADBB20T		Feb 19, 2018, 9:26:37 AM	Feb 19, 2018, 2:16:08 PM
☐ ADBC10	S0W1		IBM DB2 ADMINISTRATION TOOL FOR Z/OS V12.1 IBM DB2 Object Comparison Tool V12.1		ADBC10.GLOBAL.CSI	ADBC10T		May 13, 2022, 8:54:35 AM	Feb 19, 2018, 9:37:30 AM
☐ BLZ605	S0W1		IBM RATIONAL TEAM CONCERT V06.0.5		BLZ605.GLOBAL.CSI	BLZ605T		Apr 20, 2018, 12:11:15 PM	Apr 20, 2018, 12:11:14 PM
☐ BUZ626	S0W1		IBM URBANCODE DEPLOY FOR Z/OS V06.02.06		BUZ626.GLOBAL.CSI	BUZ626T		Feb 19, 2018, 9:57:40 AM	Feb 19, 2018, 9:57:40 AM
☐ CIU530	S0W1		CICS Interdependency Analyzer for z/OS		CIU530.GLOBAL.CSI	CIU530T		Feb 19, 2018, 10:02:42 AM	Feb 19, 2018, 2:20:08 PM

Total: 49 Selected: 0

Refresh Last refresh: Aug 8, 2023, 3:53:09 AM

Close

z/OSMF presents a listing of all the software installed in your system.

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Click Actions, then
Add to create a
Software Instance

Software Management

Software Management > Software Instances

Software Instances

Switch To: ▾

Actions ▾

- View
- Modify
- Copy...
- Open Deployments
- Perform Workflows
- Export as Portable Software Instance
- Remove...
- Retrieve Product, Feature, and FMD Information
- Delete Temporary Catalog Aliases
- Maintenance Reports
- Add**
- Show Hidden Maintenance Reports
- Select All
- Deselect All
- Configure Columns...
- Hide Filter Row
- Clear Sorts
- Export Table Data
- Print Table Data

Messages Filter	Description Filter	Activity Filter	Global Zone CSI Filter	Target Zones Filter	Categories Filter	Product, Feature, and FMD Information Retrieved (Local) Filter	Last Modified (Local) Filter	
	VS FORTRAN COMP/LIB/DEBUG 2.6.0		AFF260.GLOBAL.CSI	AFF260T		May 13, 2022, 8:54:35 AM	Feb 16, 2018, 5:07:59 PM	
	IBM HOURGLASS V7.1.0		AGG710.GLOBAL.CSI	AGG710T		May 13, 2022, 8:54:33 AM	Feb 16, 2018, 5:13:51 PM	
	IBM Tivoli System Automation for z/OS 3.5.0		AUT350.GLOBAL.CSI	AUT350T		Feb 16, 2018, 5:31:32 PM	Feb 19, 2018, 2:13:53 PM	
	IBM z/OS Connect Enterprise Edition Continuous Delivery V3.0		BAQ300.GLOBAL.CSI	BAQ300T		May 13, 2022, 8:54:33 AM	Feb 16, 2018, 5:40:34 PM	
	DB2 Administration Tool for z/OS V11.11.02.00 DB2 Object Comparison Tool for z/OS V11.11.02.00 IBM Tools Base for z/OS 01.05.00		ADB220.GLOBAL.CSI	ADB220T		Feb 19, 2018, 9:26:37 AM	Feb 19, 2018, 2:16:08 PM	
	IBM DB2 ADMINISTRATION TOOL FOR Z/OS V12.1 IBM DB2 Object Comparison Tool V12.1		ADBC10.GLOBAL.CSI	ADBC10T		May 13, 2022, 8:54:35 AM	Feb 19, 2018, 9:37:30 AM	
☐ BLZ605	S0W1		IBM RATIONAL TEAM CONCERT V06.0.5	BLZ605.GLOBAL.CSI	BLZ605T		Apr 20, 2018, 12:11:15 PM	Apr 20, 2018, 12:11:14 PM
☐ BUZ626	S0W1		IBM URBANCODE DEPLOY FOR Z/OS V06.02.06	BUZ626.GLOBAL.CSI	BUZ626T		Feb 19, 2018, 9:57:40 AM	Feb 19, 2018, 9:57:40 AM
☐ CIU530	S0W1		CICS Interdependency Analyzer for z/OS	CIU530.GLOBAL.CSI	CIU530T		Feb 19, 2018, 10:02:42 AM	Feb 19, 2018, 2:20:08 PM

Total: 49 Selected: 0

Refresh Last refresh: Aug 8, 2023, 3:53:09 AM

Close

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Software Management

Software Management > Software Instances > Add Software Instance

Add Software Instance

Welcome

Name and Description

Enter the name and description of the software instance.

System and Global Zone

Categories

Non-SMP/E Managed Data Sets

Products and Features

Summary

* Name:

DTS_Software_Release_SL23150

Description: (maximum 256 characters, currently 28 characters)

DTS Software Release SL23150

< Back Next > Finish Cancel

Provide a name and Description for the Software Instance.

Note: Name cannot have embedded spaces.

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Software Management

Software Management > Software Instances > Add Software Instance > Select System

Select System

Actions ▾

No filter applied

Nickname Filter	Sysplex Filter	System Name Filter	Description Filter	z/OSMF Host System Filter	Groups Filter	URL Filter	z/OS Version and Release Filter	JES Member Name Filter	JES Type Filter	CPC Name Filter	CPC Serial Filter
☒ S0W1	ADCDPL	S0W1			IYUCLD	https://S0W1.DAL-EBIS.IHOST.COM:10443/zosmf	z/OS V2R2	S0W1	JES2		
☐ S0W1_001	ADCDPL	S0W1				https://S0W1.DAL-EBIS.IHOST.COM:443/zosmf	z/OS V2R3	S0W1	JES2		
☐ S0W1_002	ADCDPL	S0W1				https://localhost:10443/zosmf	z/OS V2R3	S0W1	JES2		

Total: 3 Selected: 0

Refresh Last refresh: Aug 8, 2023, 4:01:24 AM local time (Aug 8, 2023, 8:01:24 AM GMT)

OK Cancel

The next step is to select a system.

I selected the first system.

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Software Management

Software Management > Software Instances > Add Software Instance

Add Software Instance

Welcome

✓ Name and Description

📁 **System and Global Zone**

Categories

Non-SMPE Managed Data Sets

Products and Features

Summary

System and Global Zone

Select the system and the global zone CSI associated with the product set. If the software instance being defined is not managed by SMPE select **No Global Zone**.

* System: S0W1

* Global Zone CSI (Learn more...)

Select or type

No Global Zone CSI

ADBB20.GLOBAL.CSI

CPH530.GLOBAL.CSI

ADBC10.GLOBAL.CSI

CTG820.GLOBAL.CSI

DDA211.GLOBAL.CSI

DDC211.GLOBAL.CSI

DFH530.GLOBAL.CSI

DFH540.GLOBAL.CSI

DFSD10.GLOBAL.CSI

DFSE10.GLOBAL.CSI

DFSF10.GLOBAL.CSI

DGA520.GLOBAL.CSI

DIT130.GLOBAL.CSI

AFF280.GLOBAL.CSI

DSNB10.GLOBAL.CSI

DSNC10.GLOBAL.CSI

DWWW520.GLOBAL.CSI

ELA601.GLOBAL.CSI

EQAE10.GLOBAL.CSI

More choices

Next select a
Global Zone CSI.

In our case we do
not use SMPE for
our install, select
**No Global Zone
CSI.**

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Software Management

Software Management > Software Instances > Add Software Instance > New Category

New Category

* Name:

Description: (maximum 256 characters, currently 31 characters)

For your first venture into Software Instances, you will have to create a category.

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Software Management

Software Management > Software Instances > Add Software Instance

Add Software Instance

Welcome

- ✓ Name and Description
- ✓ System and Global Zone
- ✓ Categories
- ➡ **Non-SMP/E Managed Data Sets**
- Products and Features
- Summary

Non-SMP/E Managed Data Sets

z/OSMF automatically includes a data set in the software instance if it is updated by SMP/E and is associated with the software in the software instance. If you have a data set that is not updated by SMP/E but is associated with the software in the software instance, such as a procedure library, configuration file, or vendor product, use the Add action to explicitly add it to the software instance.

Data Sets

Actions	Volume Filter
Modify	
Remove...	
Add...	
☒ Select All	
☐ Deselect All	
Hide Filter Row	
Clear Sorts	
Export Table Data ▶	
Print Table Data ▶	

There is no data to display.

Total: 0 Selected: 0

< Back Next > Finish Cancel

Next specify the
Non-SMP/E
Managed Data Sets.

Click on Actions,
then Add.

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Software Management

Software Management > Software Instances > Add Software Instance > Add Data Set

Add Data Set

To identify the data sets to be added to the software instance, specify a data set name qualifier, volume, or both, and click Search. Then, select the data sets you want to add. For valid data set name qualifiers, select [Learn more...](#)

Data set name qualifier: Volume: *Maximum data sets:

Select Data Sets to Add

Actions

No filter applied

Data Set Name Filter	Volume Filter
There is no data to display.	

Total: 0 Selected: 0

z/OSMF searches for the data sets to make up the Software Instance.

Specify the Data set name qualifier, then click Search.

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Software Management

Software Management > Software Instances > Add Software Instance > Add Data Set

Add Data Set

To identify the data sets to be added to the software instance, specify a data set name qualifier, volume, or both, and click Search. Then, select the data sets you want to add. For valid data set name qualifiers, select [Learn more...](#)

Data set name qualifier: Volume: *Maximum data sets:

Select Data Sets to Add

Actions

☒ Data Set Name Filter	Volume Filter
☒ DTS.R71.SL23150.INSTLIB	DTS009
☒ DTS.R71.SL23150.ISPFLIB	DTS009
☒ DTS.R71.SL23150.LOADLIB	DTS009
☒ DTS.R71.SL23150.RPTLIB	DTS009
☒ DTS.R71.SL23150.SAMPLIB	DTS009

Total: 5 Selected: 5

The results of my search provide all the data sets needed for the installation workflow.

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Software Management

Software Management > Software Instances > Add Software Instance

Add Software Instance

Welcome

- ✓ Name and Description
- ✓ System and Global Zone
- ✓ Categories
- ✚ **Non-SMP/E Managed Data Sets**
- Products and Features
- Summary

Non-SMP/E Managed Data Sets

z/OSMF automatically includes a data set in the software instance if it is updated by SMP/E and is associated with the software in the software instance. If you have a data set that is not updated by SMP/E but is associated with the software in the software instance, such as a procedure library, configuration file, or vendor product, use the Add action to explicitly add it to the software instance.

Data Sets

Actions ▾

✚ No filter applied

☒	Name Filter	Volume Filter
☒	DTS.R71.SL23150.INSTLIB	
☒	DTS.R71.SL23150.ISPFLIB	
☒	DTS.R71.SL23150.LOADLIB	
☒	DTS.R71.SL23150.RPTLIB	
☒	DTS.R71.SL23150.SAMPLIB	

Total: 5 Selected: 5

< Back Next > Finish Cancel

z/OSMF shows the selected Non-SMP/E Managed Data Sets.

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

No Products or
Features to specify.

Software Management

Software Management > Software Instances > Add Software Instance

Add Software Instance

Welcome

- ✓ Name and Description
- ✓ System and Global Zone
- ✓ Categories
- ✓ Non-SMP/E Managed Data Sets
- Products and Features**
- Summary

Products and Features

Optionally identify any products and features associated with the Non-SMP/E managed data sets.

Products and Features

Actions | Table view: Tree

No filter applied

Product/Feature Filter	Release Filter	Product ID Filter	Vendor Filter	Activity Filter	SMP/E Managed Filter	General Availability Filter	End of Service Filter	Additional Product Information Filter
There is no data to display.								

Total: 0 Selected: 0

< Back Next > Finish Cancel

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Software Management

Software Management > Software Instances > Add Software Instance

Add Software Instance

Welcome

- ✓ Name and Description
- ✓ System and Global Zone
- ✓ Categories
- ✓ Non-SMP/E Managed Data Sets
- ✓ Products and Features
- 👉 **Summary**

Summary

Review your selections. To make changes, return to the appropriate page by clicking **Back**. When you are ready to create the software instance, click **Finish**.

Name:
DTS_Software_Release_SL23150

Description:
DTS Software Release SL23150

Global Zone CSI Data Set:
NO GLOBAL ZONE CSI on system S0W1

Target Zones:
There is no data to display.

Categories:
DTS_Software_Release

Non-SMP/E Managed Data Sets

Name	Volume
DTS R71.SL23150.INSTLIB	
DTS R71.SL23150.ISPFLIB	

Total: 5

< Back Next > **Finish** Cancel

Review selections
before finalizing.

I'm happy, so I click
on Finish



Software Management

Software Management

Software Management > Software Instances

Help

Switch To:

Actions

No filter applied

Name Filter	System Filter	Messages Filter	Description Filter	Activity Filter	Global Zone CSI Filter	Target Zones Filter	Categories Filter	Product, Feature, and FMID Information Retrieved (Local) Filter	Last Modified (Local) Filter
☐			Z/OS V02 01.00						
☐ MVS	S0W1		zOS V2.3 Base		MVS.GLOBAL.CSI	CSQ800T, CSQ901T, MVST		Feb 19, 2018, 1:05:13 PM	Feb 19, 2018, 1:05:12 PM
☐ NET621	S0W1		IBM Tivoli NetView for z/OS 6.2.1		NET621.GLOBAL.CSI	NET621T		Feb 19, 2018, 1:09:07 PM	Feb 19, 2018, 3:15:06 PM
☐ QMFB10	S0W1		QM F Classic Edition V11		QMFB10.GLOBAL.CSI	QMFB10T		Feb 19, 2018, 1:16:26 PM	Feb 19, 2018, 1:16:26 PM
☐ QMFC10	S0W1		DB2 QMF FOR Z/OS v12.1		QMFC10.GLOBAL.CSI	QMFC10T		May 13, 2022, 8:54:33 AM	Feb 19, 2018, 3:17:05 PM
☐ SAS210	S0W1		IBM BATCHPIPES FOR OS/390 2.1.0		SAS210 GLOBAL.CSI	SAS210T		May 13, 2022, 8:54:33 AM	Feb 19, 2018, 1:21:01 PM
☐ TWS930	S0W1		IBM Tivoli WorkLoad Scheduler for z/OS V9		TWS930.GLOBAL.CSI	TWS930T		Feb 19, 2018, 1:25:30 PM	Feb 19, 2018, 3:19:17 PM
☐ WAS900	S0W1		WEBSPPHERE APPLICATION SERVER FOR Z/OS V9		WAS900.GLOBAL.CSI	WAS900T		May 13, 2022, 8:54:35 AM	Feb 19, 2018, 3:20:17 PM
☐ DDC211	S0W1		z/OS Appl Connect DB2 YUE 12.1.0		DDC211.GLOBAL.CSI	DDC211T		May 13, 2022, 8:54:34 AM	Feb 19, 2018, 2:34:33 PM
☐ APS460	S0W1		PRINT SERVICES FACILITY 4.6.0		APS460 GLOBAL.CSI	APS460T		Apr 18, 2018, 3:49:26 PM	Apr 18, 2018, 3:49:25 PM
☐ IAY503	S0W1		APPLICATION DISCOVERY CONNECT FOR MAINFRAME V5.0.3		IAY503 GLOBAL.CSI	IAY503T		Apr 20, 2018, 12:13:51 PM	Apr 27, 2018, 2:26:53 PM
☒ DTS_Software_Release_SL23150	S0W1		DTS Software Release SL23150				DTS_Software_Releasi		Aug 8, 2023, 4:42:28 AM

Total: 50 Selected: 1

Refresh

Last refresh: Aug 8, 2023, 4:42:02 AM

Close

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Software Management

Software Management > Software Instances

Software Instances

Switch To: ▼

Actions

- View
- Modify
- Copy...
- Open Deployments
- Perform Workflows
- Export as Portable Software Instance**
- Remove...
- Retrieve Product, Feature, and FMD Information
- Delete Temporary Catalog Aliases
- Maintenance Reports
- Add...
- Show Hidden Maintenance Reports
- Select All
- Deselect All
- Configure Columns...
- Hide Filter Row
- Clear Sorts
- Export Table Data
- Print Table Data

Messages	Description	Activity	Global Zone CSI	Target Zones	Categories	Product, Feature, and FMD Information Retrieved (Local)	Last Modified (Local)	
	Z/OS V02.01.00							
	Z/OS V2.3 Base		MVS.GLOBAL.CSI	CSQ800T, CSQ901T, MVST		Feb 19, 2018, 1:05:13 PM	Feb 19, 2018, 1:05:12 PM	
	IBM Tivoli NetView for z/OS 6.2.1		NET621.GLOBAL.CSI	NET621T		Feb 19, 2018, 1:09:07 PM	Feb 19, 2018, 3:15:06 PM	
	QMF Classic Edition V11		QMFB10.GLOBAL.CSI	QMFB10T		Feb 19, 2018, 1:16:26 PM	Feb 19, 2018, 1:16:26 PM	
	DB2 QMF FOR Z/OS v12.1		QMFC10.GLOBAL.CSI	QMFC10T		May 13, 2022, 8:54:33 AM	Feb 19, 2018, 3:17:05 PM	
	IBM BATCHPIPES FOR OS/390 2.1.0		SAS210.GLOBAL.CSI	SAS210T		May 13, 2022, 8:54:33 AM	Feb 19, 2018, 1:21:01 PM	
	IBM Tivoli WorkLoad Scheduler for z/OS V9		TWS930.GLOBAL.CSI	TWS930T		Feb 19, 2018, 1:25:30 PM	Feb 19, 2018, 3:19:17 PM	
	WEBSphere APPLICATION SERVER FOR Z/OS V9		WAS900.GLOBAL.CSI	WAS900T		May 13, 2022, 8:54:35 AM	Feb 19, 2018, 3:20:17 PM	
	Z/OS Appl Connect DB2 VUE 12.1.0		DDC211.GLOBAL.CSI	DDC211T		May 13, 2022, 8:54:34 AM	Feb 19, 2018, 2:34:33 PM	
APS460	SOW1		PRINT SERVICES FACILITY 4.6.0	APS460.GLOBAL.CSI	APS460T		Apr 18, 2018, 3:49:26 PM	Apr 18, 2018, 3:49:25 PM
IAY503	SOW1		APPLICATION DISCOVERY CONNECT FOR MAINFRAME V5.0.3	IAY503.GLOBAL.CSI	IAY503T		Apr 20, 2018, 12:13:51 PM	Apr 27, 2018, 2:26:53 PM
☒	DTS_Software_Release_SL23150	SOW1	DTS Software Release SL23150			DTS_Software_Release	Aug 8, 2023, 4:09:09 AM	

Total: 50 Selected: 1

Refresh Last refresh: Aug 8, 2023, 4:08:43 AM

Close

Now that I have a Software Instance, I can create a Portable Software Instance.

Click on Export as Portable Software Instance.

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Software Management

Software Management > Software Instances > Export as Portable Software Instance

Export as Portable Software Instance

Export Properties

Review
Export Jobs

Export Properties

Specify the properties used for the export to a portable software instance of the selected software instance.

System:
S0W1

☐ Enable merging of target data sets when deploying the portable software instance.
☐ Sign the portable software instance.

* UNIX directory:
/uljerry2/DTS_Software_Release_SL23150

* JCL data set name:
JERRY2.DM.D230808.T041102.CNTL

* Work data set name prefix:
JERRY2.SWDEPL

Specify a location for work data sets:
☐ Storage class ☒ Volume ☐ System determined
Enter a volume: * Entered volumes: STOR06

* JOB statement:

< Back Next > Save Finish Cancel

Specify a Unix directory.

z/OSMF provides a JCL data set name, as well as a Work data set name prefix.

Specify a location for work data sets.

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Provide a job card.

Software Management

Software Management > Software Instances > Export as Portable Software Instance

Export as Portable Software Instance

Export Properties

Review
Export Jobs

Export Properties

Specify the properties used for the export to a portable software instance of the selected software instance.

JERRY2.DM.D230808.T041102.CNTL

* Work data set name prefix
JERRY2.SWDEPL

Specify a location for work data sets:

☐ Storage class ☒ Volume ☐ System determined

Enter a volume:

Add Remove

* Entered volumes:
STOR06

* JOB statement:

```
//JERRYA JOB ACCT#,SPENCER,MSGCLASS=A,MSGLEVEL=(1,1),NOTIFY=&SYSUD  
/*  
/*  
/*
```

Undo Changes Restore Defaults

< Back Next > Save Finish Cancel

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Software Management

Software Management > Software Instances > Export as Portable Software Instance

Export as Portable Software Instance

Export Properties
Review
Export Jobs

Review

Review the summary of the contents for the software instance that will be exported.

SMP/E Zones **Data Sets** UNIX Data Sets

Actions
No filter applied

Data Set Name Filter	Messages Filter	Data Set Category Filter	Volumes Filter	Data Set Type Filter	RECFM Filter	LRECL Filter	BLKSIZE Filter	Tracks Filter	% Used Filter	Extents Filter	Z Filter
DTS.R71.SL23150.INSTLIB			DTS009	PDS	FB	80	3120	15	66	1	
DTS.R71.SL23150.ISPFLIB			DTS009	PDS	FB	80	3120	180	86	2	
DTS.R71.SL23150.LOADLIB			DTS009	PDS	U	0	6144	105	84	2	
DTS.R71.SL23150.RPTLIB			DTS009	PDS	FB	80	3120	75	12	1	
DTS.R71.SL23150.SAMPLIB			DTS009	PDS	FB	80	3120	75	74	1	

Total: 5

< Back Next > Save Finish Cancel

z/OSMF shows me the Data Sets that will make up my Portable Software Instance.

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Software Management

Software Management > Software Instances > Export as Portable Software Instance

Export as Portable Software Instance

Export Properties
Review
Export Jobs

Export Jobs

Review the jobs created for this export, and submit the jobs in sequential order. When all the jobs are complete, click Finish.

Messages 0 0 1

Job "JERRYA" (JOB01549) has been submitted. IZUD786I Aug 8, 2023, 12:14:20 PM

JCL data set name: JERRY2.DM.D230808.T044435.CNTL
System: SDW1

Jobs

Actions

No filter applied

Sequence Filter	JCL Data Set Member Name Filter	Description Filter	System Filter	Status Filter	Messages Filter	Job Name Filter	Job ID Filter
1	IZUD01EX	Export Software Instance: Create portable archives for each data set in the software instance.	SDW1	Submitted		JERRYA	JOB01

Total: 1 Selected: 0

Refresh Last refresh: Aug 8, 2023, 12:13:32 PM local time (Aug 8, 2023, 4:13:32 PM GMT)

< Back Next > Save Finish Cancel

z/OSMF submits a job to build the Portable Software Instance.

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

Software Management

Software Management > Software Instances > Export as Portable Software Instance

Export as Portable Software Instance

Export Properties
Review
Export Jobs

Export Jobs

Review the jobs created for this export, and submit the jobs in sequential order. When all the jobs are complete, click Finish.

Messages 0 0 1

Job "JERRY" (JOB01549) has been submitted. IZUD786I Aug 8, 2023, 12:14:20 PM

JCL data set name: JERRY2.DM.D230808.T044435.CNTL
System: SDW1

Jobs

Actions

No filter applied

Sequence Filter	JCL Data Set Member Name Filter	Description Filter	System Filter	Status Filter	Messages Filter	Job Name Filter	Job ID Filter
1	IZUD01EX	Export Software Instance: Create portable archives for each data set in the software instance.	SDW1	Complete		JERRY	JOB01

Total: 1 Selected: 0

Refresh Last refresh: Aug 8, 2023, 12:14:57 PM local time (Aug 8, 2023, 4:14:57 PM GMT)

< Back Next > Save Finish Cancel

The job has run and the Portable Software Instance has been created.



WRAP UP

BUILDING A MORE ROBUST WORKFLOW

- Multiple steps (not just one)
- Different Step Types (JCL and Instructions)
- Automation
- Prerequisites
- Workflow can be called by another workflow

WRAP UP

EXECUTE THE WORKFLOW

- Assign steps to other users
- Accept and Perform steps
- Specify values for variables
- Specify values for variables in a file

WRAP UP

AN EVEN MORE COMPLEX WORKFLOW

- Composite steps
- Call another workflow
- Pass variables between workflows

“AND NOW FOR SOMETHING COMPLETELY DIFFERENT”

- PSWI (Portable SoftWare Instances) are the answer to providing the source for an install
- Need to create a SoftWare Instance first
- Export the SoftWare Instance as a PSWI

QUESTIONS



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Submit a session evaluation for each session you attend:

www.share.org/evaluation

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